EMPHASES NEEDED IN PROGRAMS OF VOCATIONAL AGRICULTURE

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By

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CHAPTER I

INTRODUCTION

Vocational education in agriculture received federal recognition and support with the passage by Congress in 1917 of the Smith-Hughes Act, a national vocational education act. The controlling purposes of the Act are:[1]

> 1. that such education shall be to fit for useful employment,
> 2. that such education shall be less than college grade,
> 3. that such education be designed to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home.
>
> Only public schools are eligible for aid under the Act. Instruction in vocational agriculture, under the terms of the Act, shall in every case provide for directed or supervised practice in agriculture (for a minimum of six months per year).

In the controlling purposes of the Smith-Hughes Act it is clearly stated that instruction for adults (who have entered upon farming) was intended to have been provided for by the Act. It should be further noted that directed or supervised practice in agriculture for at least six months per year is required of any student, high school or adult, who is receiving instruction under the Smith-Hughes Act. This supervision of practice is the legal responsibility of the teacher of agriculture.

In 1946 the George-Barden Act was passed by Congress.[2] The

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[1] National Vocational Education Act (Smith-Hughes), Public No. 347, S. 703, 64th Congress.

[2] George-Barden Act, Public Law No. 586, Senate 619, 79th Congress.

George Barden Act replaced the George-Reed, George-Ellzey, and George-Deen Acts, which supplemented the Smith-Hughes Act.

The George-Barden Act specifically charges the teacher of agriculture with the supervision of the . . . activities related to the Future Farmers of America and the New Farmers of America, in addition to the other duties outlined in the Smith-Hughes Act.[3]

Phipps lists the following as the major phases which are integral parts of the instruction in vocational agriculture:[4]

1. Classroom activities
2. Supervised farming programs of the students
3. Farm mechanics activities
4. Training in food preservation in school-community canneries
5. School sponsored organizations, such as Future Farmers of America, New Farmers of America, and Young Farmers.

The time required of the agricultural teacher by the activities just listed, especially the last three, has progressively lengthened since 1917. Other activities which require a great deal of the agricultural teacher's time are community service (educational), public relations, office work, non-agricultural school duties, professional meetings and the Future Farmer program.[5]

Statement of the Problem and Purpose of the Study

The problem in this study is one of determining emphases needed in programs of vocational agriculture. This study is to determine the class and activity emphases needed in programs of vocational agriculture according to the opinions of farmers, teachers of vocational agriculture and county superintendents of public schools in North Carolina, and agricultural education specialists in the United States.

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[3] Ibid., Section III.

[4] L. J. Phipps, A Handbook on Teaching Vocational Agriculture (Danville: The Interstate Printing Co., 1952), p. 15.

[5] E. W. Garris, Teaching Vocational Agriculture (New York: McGraw Hill Book Co., 1953), Chapter 3.

Further information obtained from the teachers of vocational agriculture included estimates of:

1. The non-agricultural duties performed by them in 1951-52.
2. The proportion of time spent in community "service" functions versus time spent in truly educational service.
3. The relative amount and the adequacy of time devoted to each of the major classes taught.
4. The number of visits and length of time spent in on-farm teaching in 1951-52.
5. The relative contribution of instruction (to the three classes—high school, young farmer, adult farmer) toward establishment and advancement in farming.

Need for the Study

Literature supporting statements made in this section is cited in Chapter II.

Vocational agricultural education literature indicates that adults in agriculture are being neglected, which means that not all of the provisions of the National Vocational Education Acts are being met. Even though adults in agriculture are being neglected, the agricultural teachers are working long hours and "lack of time" is listed as one of the main reasons why more instruction is not being given adults. Some studies indicate that agricultural teachers are performing non-agricultural duties to the detriment of their program. There exists a feeling on the part of some in general education, as well as agricultural education, that better preparation for working with adults is needed by school personnel. Many writers have contended that a re-examination of emphases in vocational agriculture is in order, while some leaders in vocational agriculture have gone so far as to recommend certain shifts in emphases in vocational agriculture.

This study should make a definite contribution to vocational agriculture at the local, state and national levels in determining the emphases needed in future programs.

Limitations

This study is limited to determining the emphases needed in vocational agriculture according to the opinions of selected farmers in North Carolina, North Carolina teachers of vocational agriculture, North Carolina county superintendents of public schools, state supervisors of agricultural education and heads of departments of agricultural education in the United States, Puerto Rico and Hawaii, all members of the white race. The fact that the study is largely one of opinions, rather than one of facts, should be constantly borne in mind by the reader. Also the low percentage of responses from the farmers and teachers, and the possible bias therefrom should be remembered. This low response constitutes perhaps the most serious weakness of the study. The fact that all responses were anonymous made a follow-up of non-respondents impossible.

Procedure

1. Questionnaires for the agricultural teachers of North Carolina were presented at the 1952 annual conference of this group. About

four hundred questionnaires were distributed at that conference. From the 130 forms returned, one hundred were completely answered and used in the study. Thirty returned questionnaires were discarded because teachers failed to answer fifty per cent of the questions. Sample questionnaires for the different population groups are given in the appendix.

2. Questionnaires and accompanying letters were mailed to approximately four hundred North Carolina farmers, all fathers of graduating seniors of the 1951-52 high school classes in schools having vocational agriculture. Five follow-ups were used with the farmer group in getting a total of 133 replies which, according to postmark, represented sixty-two of the ninety-seven North Carolina counties with departments of vocational agriculture.

3. Following the first questionnaire and its accompanying letter, three follow-ups were made with the county superintendents of schools. Of the ninety-seven of these individuals in the study, seventy-eight responded.

4. Ninety-six of the 104 individuals who are state supervisors of agricultural education or heads of agricultural education departments participated in the study. Only one follow-up was used with this group.

5. Replies of all four groups were kept anonymous.

6. Related literature was reviewed.

7. In determining emphases needed in vocational agriculture, the writer used the replies of the four different population groups and information in the related literature.

Maps on the following pages present the locations of the departments (white) of vocational agriculture in North Carolina and locations of counties in which school superintendents and farmers participated in this study.

Definitions of Terms

These definitions are adapted from A Handbook on Teaching Vocational Agriculture:[6]

Adult farmer classes - classes for farmers who are operating farms.

All-day classes - classes for in-school farm youth who are enrolled in high schools and who meet daily during the school year.

Classroom instruction - instruction in the classroom, the basis of which should be the supervised farming programs.

Community service - a service program is concerned only with getting a job done. An educational program is concerned with developing the abilities of individuals to do a job themselves. An agricultural department is a part of the school. Schools are established for education and not for service. An agricultural department cannot afford to dissipate its energy on service activities alone.

Future Farmers of America - the national organization of, by, and for boys studying vocational agriculture in public secondary schools which operate under the provisions of the National Vocational Education Acts.

On-farm instruction and supervision - instruction and supervision on the farm in which the same general methods recommended for use in the classroom are utilized. The difference is that much of the teaching on the farm is individual. The teaching on the farm should develop out of and be an extension of the teaching done in the classroom and vice versa.

Supervised farming program - opportunity for the students to apply the knowledge and skills learned at school to their home farm situations.

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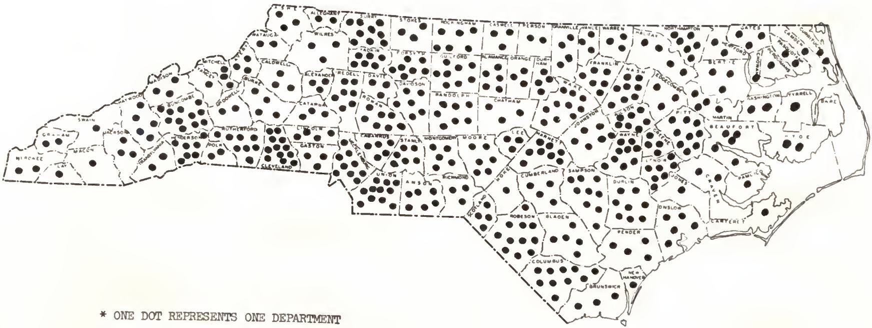
[6] Phipps, op. cit.

FIGURE 1

DEPARTMENTS OF VOCATIONAL AGRICULTURE IN NORTH CAROLINA WHITE HIGH SCHOOLS (EXCLUDING INDIAN), 1952-53*



* ONE DOT REPRESENTS ONE DEPARTMENT

FIGURE 2

NORTH CAROLINA COUNTIES (DETERMINED BY POSTMARK) WHOSE SUPERINTENDENTS OF SCHOOLS PARTICIPATED IN THIS STUDY

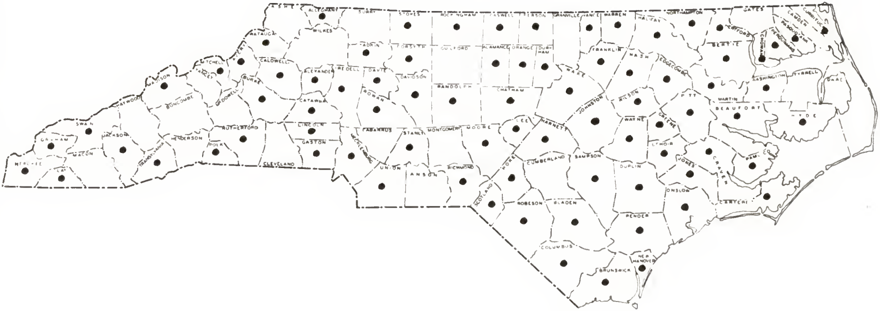
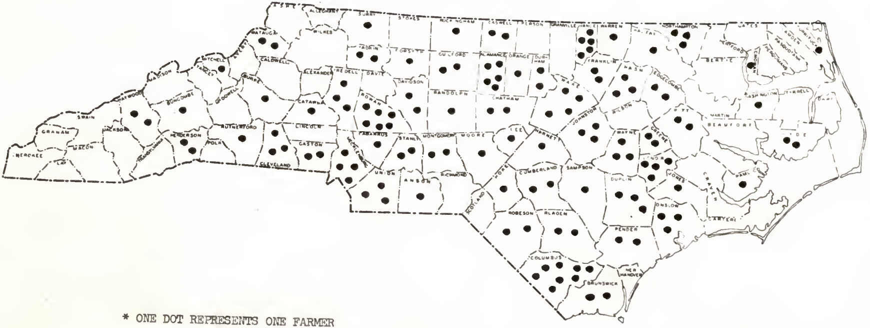


FIGURE 3

NORTH CAROLINA COUNTIES (DETERMINED BY POSTMARK) IN WHICH FARMERS PARTICIPATED IN THIS STUDY*



* ONE DOT REPRESENTS ONE FARMER

Veteran Farmer Training Program - classes for farmer veterans of World War II and of the Korean conflict. This program was made possible through Public Law 346, the "Servicemen's Readjustment Act of 1944" and Public Law 550, the "Veteran's Readjustment Assistance Act of 1952."

Vocational education in agriculture - a nationwide, federally aided program of systematic instruction in agriculture and farm mechanics of less than college grade, conducted in public schools or classes for those persons over 14 years of age; who have entered upon or who are preparing to enter upon the work of the farm or of the farm home, under a plan of cooperation between State Boards for Vocational Education and the United States Office of Education.

Young farmer classes - classes for out-of-school farm youth who are becoming established in farming or who desire to become established.

CHAPTER II

REVIEW OF VOCATIONAL AGRICULTURE IN NORTH CAROLINA AND OF OTHER LITERATURE RELATED TO THE PRESENT STUDY

Many of the studies dealing with the vocational agriculture program and its various classes, of the time distribution of the teacher, of teacher activities, and of the community services of the teacher relate in a sense to the problem under consideration. This study is perhaps more nearly classified with the time distribution and over-all program planning.

Brief History of Vocational Agricultural Education in North Carolina

Armstrong stresses the importance of the work of organized groups in the early days of agricultural education in North Carolina and gives an excellent chronological summary of events up to 1928. A portion of his summary is presented below:[1]

1776 - Constitution says, 'all useful learning shall be duly encouraged.'
1789 - Charter granted the University.
1823 - Governor Holmes recommends experimental farm at the University.
1854 - First professor of agricultural chemistry at the University.
1867 - North Carolina accepts the Land-Grant Funds.
- North Carolina sells land scrip.
1868 - Reconstruction Board selects new president and faculty.
- First professor of agriculture at the University.
- Constitution requires University to establish agricultural

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[1] L. O. Armstrong, "The Development of Agricultural Education in North Carolina" (Unpublished Master's thesis, Department of Agricultural Education, North Carolina State College, 1932).

department.

1872 - First North Carolina State Fair.
- Colonel Polk pleads for a real agricultural college.

1887 - Two mass meetings of farmers in Raleigh to petition Legislature for Agricultural and Mechanical College.
- Industrial School Law revised creating the North Carolina College of Agriculture and Mechanic Arts.

1889 - North Carolina A. and M. College opened.

1899 - Bill proposing to require the teaching of elements of agriculture in the public schools fails to become law.

1901 - Revisal of public school laws requires the teaching of elements of agriculture in the public schools.

1902 - Survey in North Carolina by the General Education Board.
- A. & M. Summer School offers courses in agriculture for teachers.

1904 - Superintendent of Public Instruction recommends continuing to teach elements of agriculture in the public schools -- and suggests an appropriation for studying successful schools in other states.

1910 - State Superintendent of Public Instruction notifies county superintendents that agriculture will be emphasized in teachers' institutes.
- Continues his recommendation for farm-life school appropriation.
- Carolina Union Farmer urges farm-life schools.

1911 - Farm Life School Law passed.

1913 - Guilford County Farm-Life School Law made state-wide in application.

1914 - Governor Craig accepts the Smith-Lever funds for the State.

1915 - Legislature approves the governor's acceptance of the Smith-Lever funds.

1917 - Legislature accepts Smith-Hughes funds, and creates State Board for Vocational Education.
- Department started at North Carolina State College for training teachers of vocational agriculture.
- Legislature passes law requiring agriculture, manual training, and domestic science in the public schools.

1921 - Part-time, day-unit, and evening classes started in connection with departments of vocational agriculture in rural high schools and remaining farm-life schools.

1927 - Young Tar Heel Farmers organized.

Worley gives further important dates in the history of agricultural education in North Carolina:

> In 1926-27 the New Farmers of America became established. The White Lake Future Farmer of America Camp (the first of its kind in the south) opened June 4, 1927. In October, 1940, (1940-41 fiscal year) Congress passed Public Law No. 812, which was the initial step for the national defense program. On

> November 1, 1940, the Defense Training Program was started in North Carolina with Dr. T. E. Browne, State Director of Vocational Education serving as State Director of the Program. On July 2, 1942 the national defense program was re-named Rural War Production Training Program, with A. L. Teachey as State Director. In 1940-45 the name of the national defense program was changed, and the program was greatly expanded. In February, 1946, the veteran-on-farm training program was started in North Carolina. Also, in 1946 the George Barden Act was passed.[2]

The vocational agriculture program in North Carolina has grown rapidly during the past three decades. From Table 1 it can be seen that the 1950 total enrollment in vocational agriculture classes in North Carolina approximated that for the entire nation in 1920. Table 1 also reveals a 4000 per cent enrollment increase in North Carolina for this thirty-year period as compared to a 2000 per cent increase for the nation as a whole.

Especially significant have been the increases in time devoted to community service functions (canneries, demonstrations, fence post treatment, and related activities) and to teaching and supervising special classes such as the Rural Production War Training Program during World War II, and, more recently, the Veteran Farmer Training Program. A considerable portion of the schedule of the teacher of vocational agriculture is claimed by professional meetings and upgrading activities such as conferences, short courses and summer school. Many farm shop programs have expanded to the extent that the teacher of vocational agriculture, or some other qualified individual, must spend

---

[2] William H. Worley, "Origin and Expansion of Vocational Agricultural Education in North Carolina, 1917-51" (Non-thesis Study 1951, Department of Agricultural Education, University of Maryland).

TABLE 1

TOTAL ENROLLMENT IN ALL VOCATIONAL AGRICULTURE CLASSES

Year	United States[a]	North Carolina[b]
1920	31,301	721
1930	188,311	10,520
1940	584,133	32,247
1950	764,408*	30,095*

[a] Digest of Annual Reports of State Boards for Vocational Education. Federal Security Agency, Office of Education, Division of Vocational Education, Washington, D. C., 1950, 1930.

[b] North Carolina State Department of Public Instruction, State School Facts, XXII, May, 1950.

*Exclusive of veteran farmer trainees.

long after-school hours in teaching to meet the demands of the community for care, repair and construction of farm machinery and equipment.[3]

Vocational Agricultural Education in North Carolina 1952-53, and Emphases Therein

The North Carolina Annual Descriptive Report to the United States Office of Education indicates the present status of, and future plans for vocational agriculture in that state. Certain portions of this report are given below:[4]

---

[3] State Department of Public Instruction, Vocational Agricultural Education in North Carolina Public Schools (Raleigh: Division of Vocational Education, 1951), Publication No. 276.

[4] 1952-53 Annual Descriptive Report, Agricultural Education

In 1952-53 there were 443 white departments of vocational agriculture in North Carolina. Four hundred and fifty-six teachers were employed to teach 21,473 high school boys, 4,489 young farmers and 4,824 adult farmers. (These enrollments constitute a teaching load of sixty-seven students per teacher, all students needing individual instruction and supervision on their home farms).

Of the 443 departments, 354 had young farmer classes and 305 departments had adult farmer classes, with many departments having both young and adult farmer classes. (These figures indicate, to a degree, the emphasis given adult work in agriculture in North Carolina.)

Every department of vocational agriculture in North Carolina has a farm mechanics program.

During 1952-53 seventeen new agriculture departments (seven white and ten Negro) were started in North Carolina. A second agricultural teacher was added to nine departments (eight white and one Negro). Twenty-one new shop buildings, eight new classrooms and forty-three combination shop and classrooms were constructed in 1952-53.

Plans for development (emphases) include:

a. For the year 1953-54 and for several years to come our plans are to give more emphasis, through workshops and extension courses for teachers, to farm mechanics such as tractor repairs and operation, maintenance of farm machinery, simple electrical repairs and motor maintenance.

b. Continued emphasis on follow-up records of former students. A special form was prepared and distributed to all teachers last year and will be used continually in the future.

c. Improve public relations with all school personnel.

d. Continue to develop and improve the Young Farmer and Adult Farmer instructional program.

e. Improve the FFA and NFA programs as an important factor in the vocational agricultural program.

f. Upgrading of teachers in service by better organized group conferences, workshops, extension courses and personal visits by supervisory staff and teacher training staff.

We anticipate a total enrollment of Korean veterans by March 1, 1954 of approximately 8,000.

Additional Information

Local interest in vocational agriculture continues to

Division of Vocational Education, State Department of Public Instruction, State of North Carolina to the U. S. Office of Education, Washington, D. C. (Raleigh: State Department of Public Instruction, 1953).

> increase to the extent that we are not able to approve all requests for new departments due to lack of funds. During the next few years there will be a number of schools consolidated where we will have departments of vocational agriculture. However, this will not decrease the need for teachers of vocational agriculture since the increased enrollment due to consolidation will necessitate the services of a second teacher.
>
> Nine white and seven Negro schools applied for vocational agricultural departments in 1952-53 but, largely due to lack of funds, the departments could not be approved.

The philosophy underlying vocational agricultural education in North Carolina has been summarized by the members of the North Carolina vocational agricultural education supervisory and teacher training staffs as follows:[5]

> The general aims and objectives of a program of vocational agriculture supports the general objectives and philosophy of the whole public school program.
>
> More specifically, vocational agriculture is concerned with a fourth aim of education, namely: To train present and prospective workers for proficiency in their respective fields.
>
> To attain this fourth aim of education, workers in vocational agriculture have the responsibility of offering organized systematic instruction in agriculture in all of its phases to three distinct groups of students in a given school area. These are: Young men who have left school and are engaged in farming in the community; adult farmers in the school, already established in farming, who feel the need for continued instruction; and high school students, which make up the in-school group, the prospective farmers of tomorrow. The two former classes of students compose the out-of-school group, the present farmers. The teacher of vocational agriculture has a joint and equal responsibility for teaching both the out-of-school group and the in-school group.
>
> Much of the teaching in a department of vocational agriculture is on a doing level -- in the classroom, in the school farm shop, and on the home farms of all students enrolled. In this respect, it may differ from the classroom teaching of some of the other high school subjects.
>
> The nature of the work of a teacher of vocational agriculture requires that a part of it be done away from the school.

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[5] State Department of Public Instruction, op. cit.

From the above statements it could be concluded that vocational agricultural education leaders in North Carolina were emphasizing the importance of instruction of adult and young farmers along with that of high school students. It might further be concluded that the importance of away-from-school instruction is being stressed.

Work Load of Vocational Agricultural and Other Teachers

In 1949 North Carolina agricultural teachers were found to be working 58.7 hours per week.[6] In a recent study it was found that the average teacher of vocational agriculture in one state spent 54.2 hours per week for professional activities.[7] An Ohio study revealed 61 hours and 32 minutes as the average work week of the teacher of vocational agriculture.[8] Fifty-three and three-tenths hours were reported as the average work week by Knight for 22 teachers of vocational agriculture in Tennessee in the summer of 1942.[9] Sweaney found in Michigan that teachers of vocational agriculture spent as much time at work outside of the regular school hours as they spent in the classroom, . . . worked excessive hours, and were thereby, prevented from developing many useful programs through which they might have exercised greater influence on their respective communities.[10]

---

[6] Harold B. Wall, "How Teachers of Vocational Agriculture Utilize Their Time During the Summer Months" (Unpublished Master's thesis, Department of Agricultural Education, North Carolina State College, 1951), p. 18.

[7] Charles W. Hill, "Time Used for Professional Activities by Vocational Agriculture Teachers in West Virginia, 1947-1948" (Unpublished Doctor's thesis, Department of Agricultural Education, Cornell University, 1949), p. 413.

[8] Ray Fife, The Organization and Financing of Vocational Education in Agriculture for Ohio, Bulletin 144 (Washington, D. C.: Federal Bureau for Vocational Education, 1928), p. 54.

[9] E. B. Knight, "Summer Activities of Tennessee Teachers of Vocational Agriculture" (Nonthesis Study, Department of Agricultural Education, University of Tennessee, 1940), p. 40.

Peterson found a modal work week of 52.9 hours (based on 52 work weeks per year) for Minnesota agricultural teachers.[11] Arkansas teachers worked 52 hours per week according to a study in that state.[12] Most of the New Mexico teachers felt that they had too much to do . . .[13] The average agriculture teacher in a study of 752 men during two summers was found to have worked 54.6 hours per week.[14] Montana teachers of agriculture were found to be working 65 hours per week.[15]

Stucki found in Idaho that a majority of the 55 agricultural teachers studied reported that additional qualified instructors should be employed to help carry the extra load (beyond the all-day program). Respondents reported that an average of 50 all-day students would constitute a full-time load for one vocational agriculture instructor. A large percentage of the agricultural teachers in Idaho believe that their activities as teachers are too many and too varied.[16] During the regular 1950 school term Boyd found an average work week of 59.2 hours for eleven Texas teachers of vocational agriculture.[17]

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[10] H. P. Sweaney, Use of Time by Teachers of Vocational Agriculture in Michigan, Research Bulletin Number 2 (Lansing, Michigan: Division of Education, Michigan State College, 1949), p. 8.

[11] M. J. Peterson, "How Do Teachers of Agriculture in Minnesota Use Their Professional Time?" (Unpublished Master's thesis, Department of Agricultural Education, Cornell University, 1937).

[12] R. W. Roberts, "How Teachers of Vocational Agriculture in Arkansas Use Their Time," Special Study, 1934, University of Arkansas. The Agricultural Education Magazine, VI (May, 1934).

[13] C. G. Howard, "Teacher Activities in Vocational Agriculture" (Nonthesis Study, Department of Vocational Agriculture, New Mexico College of Agriculture and Mechanical Arts, 1946), p. 23.

[14] S. S. Richardson, "An Analysis of Reports Covering the Summer Work of Teachers of Vocational Agriculture for the Purpose of Determining Distribution of Time Given to Various Activities and to Improve the Method of Reporting" (Unpublished Master's thesis, Department of Agricultural Education, University of Idaho, 1938).

[15] L. L. Knuti and D. Lee, "Use of Time by Montana Vocational Agriculture Instructors" (Nonthesis Study, Department of Agricultural Education, Montana State College, 1951), p. 15.

Comparison of Work Loads

Hammonds found that, while vocational agriculture and non-vocational teachers spent approximately the same time in all-day classroom teaching, the vocational agricultural teacher had an average work week of 56.55 hours compared to a 46.83 hour work week for the non-vocational teacher.[18] In West Virginia the time per day (based on a six-day week) at the job of teaching was found to be 8.5 hours for the average high school teacher and 9.59 hours for the teacher of vocational agriculture.[19] A Louisiana study of agricultural teachers who were also serving as principals, and of full-time agricultural teachers revealed that the former group spent 135 minutes daily in extra-class activities while the full-time vocational agricultural teacher spent 210 minutes per day in extra-class activities.[20] A 1950 survey of 2200 school teachers of all subjects revealed an average work week of 47.9 hours.[21]

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[16] M. G. Stucki, "Evaluation of Selected Activities in Vocational Agriculture" (Unpublished Master's thesis, Department of Agricultural Education, University of Idaho, 1950).

[17] O. I. Boyd, "A Study of the Time Spent in Various Activities by Teachers of Vocational Agriculture in Certain Texas High Schools During a Regular Term" (Nonthesis Study, Texas Agricultural and Mechanical College, 1950), p. 29.

[18] Carsie Hammonds, "Distribution of Time of Teachers of Vocational Agriculture in Kentucky and Distribution of Time of Teachers of Non-vocational Subjects" (Nonthesis Study, University of Kentucky, 1936), p. 21.

[19] C. O. Headlee, "The High School Teacher's Day as Revealed

The studies cited indicate that, as a group, teachers of vocational agriculture work long hours, possibly longer than other school personnel. Some reports have included recommendations on how the individual teacher might more efficiently use his time. No extensive formal study of reactions to future program alternatives was found. Four such alternatives were discussed by Kirkland in 1950.[22] These alternatives, with certain modifications, were the ones used in the present study.

Further Literature Relating to Agricultural Teacher Load

In reviewing literature related to this study, one is impressed with the general consensus that the teacher of vocational agriculture

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by Time Accounting of a Typical Week" (Master's Special Study, West Virginia University, 1938), p. 34.

[20] C. L. Mondart, "The Teaching Load of the Agricultural Teacher in Louisiana" (Unpublished Master's thesis, Department of Agricultural Education, Louisiana State University, 1929).

[21] National Education Association Bulletin, Teaching Load in 1950, XXIX, No. 1 (Washington: Research Division of the National Education Association, February, 1951), p. 14.

[22] J. B. Kirkland, "Future Programs and Their Development," The Agricultural Education Magazine, 23 (July, 1950), 3, 18.

is working long hours. It is also significantly evident that new duties and services have been accumulating over the years for the teacher and, at the same time, old phases of his program are constantly receiving new emphasis. For example, among the current trends reported in a 1951 article were:[23]

> Increasing attention to part-time farmers, more emphasis to pre-vocational agriculture, re-emphasis on supervised farming, greater emphasis on the Future Farmers of America organization, young farmer classes are increasing, adult farmer classes are increasing, a trend toward year around activities and farm mechanics is receiving greater emphasis.

Only three recommendations from the state or federal level in agricultural education for a reduction in agricultural teacher load or for a de-emphasis of any part thereof were found. From New Mexico came the advice that "a few major areas be attempted and the rest left alone till time for their consummation can be found.[24] The Utah State Director of Vocational Education in Agriculture asks:[25]

> Isn't it about time we call a halt to all this overload business while the vocational agriculture teacher still has enough substance left to cast a shadow? . . . The solution of the problem of overload lies with the teacher himself . . . The answer to the overload problem is better teacher management - first things first . . . .

A 1945 study of 159 superintendents of schools revealed that these officials felt that a reduction in time (spent in all-day vocational agriculture instruction) would not reduce the quality of the instructional program. Two-thirds of the superintendents recommended a reduction in time for vocational agriculture.[26]

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[23] Walter Schroder, "Looking Ahead, Trends," The Agricultural Education Magazine, 23 (June, 1951), 268.

[24] Howard, op. cit.

[25] Mark Nichols, "Help, This Teacher Load is Killing Me," The Agricultural Education Magazine, 23 (September, 1950), 68-9, 71.

Non-Agricultural Duties and Community Service

Woods concludes, in a thesis on non-agricultural activities of teachers of vocational agriculture, that such activities play an important part in the work of the teacher.[27]

Deveau, in a 1948 New York State study of 164 teachers, reported that 62 different non-agricultural school activities were engaged in for the 1947-48 school year, and 72 different community activities were completed for 1946-48.[28] Cushman reported that his dissertation . . . indicated that teachers need the help of principals, superintendents, advisory committees, and state office personnel in shaking themselves free of time-consuming trivia and non-vocational busy work.[29] A group of Arkansas teachers of vocational agriculture were found spending 5 per cent of their time on non-agricultural duties.[30]

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[26] H. M. Byram, R. M. Clark and others, Scheduling and Teaching Vocational Agriculture in Michigan, Bulletin 2071 (Nonthesis Study, Michigan State Board of Control for Vocational Education, 1945), p. 11.

[27] S. D. Woods, "Non-Agricultural Activities of Vocational Agricultural Teachers" (Unpublished Master's thesis, Department of Agricultural Education, George Peabody College for Teachers, 1930).

[28] B. W. Deveau, "School (Non-agricultural) and Community Activities of Vocational Agriculture Teachers in New York State" (Unpublished Master's thesis, Department of Agricultural Education, Cornell University, 1948).

[29] H. R. Cushman, "What's Hindering the Development of the Young Farmer Program?" The Agricultural Education Magazine, 25 (Nov., 1952), 100.

[30] Roberts, op. cit.

Sixty-two Minnesota agriculture teachers reported having taught other than vocational classes for 10 per cent of their work week (52.9 hours) in 1935-1936.[31] In another study, as the number of "extra" subjects increased, there was an increase in the percentage of teachers who believed that teaching such subjects hampered their community activities.[32] Michigan agricultural teachers . . . were too frequently saddled with duties not directly related to agriculture.[33]

North Carolina teachers of vocational agriculture, during the summer of 1949, mowed the school lawns, planted shrubs, and repaired school property on the average of 2.8 hours per week.[34]

Those in vocational education in agriculture fully realize their role as teachers directly responsible to the school administrators. In order to promote the community program of the agriculture teacher, however, and since "it is to the interest of the high school principal to aid the agriculture teacher,"[35] arrangements are often made on the local level whereby the agricultural teacher can use part of the regular school day to further his community work, to prepare lessons and materials, to do his correspondence and other office work and to attend to other duties rather than be assigned non-agricultural work. In other cases, however, as the literature just reviewed indicates, performance of non-agricultural duties has been a hindrance to the vocational agricultural education program.

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[31] Peterson, op. cit.

[32] Albert Barnett, Organized Community Activities of Agriculture Teachers, Contributions to Education, No. 36 (Nashville: George Peabody College for Teachers, 1926).

[33] Sweaney, op. cit.

[34] Wall, op. cit.

[35] G. E. Dugal, "A Study of Certain Situations Existing in Agricultural High Schools" (Unpublished Master's thesis, Department of Agricultural Education, Louisiana State University, 1937).

An emphasis, from both lay constituents and agricultural education workers, on community service work is noted in the literature.[36]

Albert Barnett reported that:[37]

> Out of a total of 1830 teachers of vocational agriculture studied, 91 per cent believed that one-fourth or more of the school day was necessary for an agriculture teacher to be off duty from school in order to promote a well-rounded community program. About 45 per cent of the teachers had less than one-fourth day off duty.

Wall stated:[38]

> Of the North Carolina teachers who had canneries, (in the 1949 summer study), an average of 3.5 hours in obtaining equipment and 11.7 hours of actual work in the cannery were spent each week. . . . Much of the teacher's time is absorbed by calls to perform the function of a semi-skilled mechanic. The vocational agriculture teacher, a trained specialist, has many activities assigned or shifted to him . . . .
>
> Many of the repairs made to machinery and equipment are neither instructional nor educational, but represent a shifting of the role of village mechanic to the teacher . . . . It is recommended that the agriculture teacher's program and his time distribution be re-evaluated.

Need for Re-examination of Emphases in Vocational Agriculture Stressed

Suggested problems vital to the teacher of vocational agriculture (in the order listed) as viewed by the 1951 National Vocational Agriculture Teacher Association were:[39]

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[36] Arthur Raper and U. T. Summers, "What Do Farmers Expect After the War?" The Agricultural Situation, 28 (October, 1944), 20-23.

[37] Barnett, op. cit.

[38] Wall, op. cit.

> Should we develop a set of standards for teacher load in respect to all-day, young farmer and adult programs? What recommendations would the front line teacher make which would improve the agricultural education program in the nation? What is the agriculture teacher's job? Is vocational agriculture an integral part of the secondary school or is it a program separate and apart from the rest of the school? What is the relationship of the vocational agriculture teacher to the Young Farmer Program? What is the relationship of the vocational agriculture teacher to the Adult Program?

Garner writes:[40]

> From time to time . . . teachers have questioned their distribution of time, especially when they felt they were not finding it possible to devote sufficient time to certain phases of their work. In fact, keeping first things first . . . keeping minor obligations from overshadowing and crowding out major responsibilities . . . is a real problem to many teachers.

The National Conference on Research Related to Future Programs of Agricultural Education emphasized, in its 1949 meeting, the "evaluation of teacher activities and teacher loads,"[41] indicating a need for research in this area. A United States Office of Education bulletin stresses a re-examination of purposes in agricultural education and states: "Programs born in the war emergency, and the forced adaptations of existing programs, opened new horizons and stimulated investigation of the problems involved in providing expanded or extended programs of education in agriculture."[42] The first year difficulty reported by the highest percentage of teachers in a doctoral study was "inability to perform activity in the area of program planning."[43]

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[39] L. E. Cross and Leroy Bunnell, "Some Issues and Problems as Seen by the National Association," The Agricultural Education Magazine, 23 (June, 1951), 268 ff.

[40] Raymond Garner, "Time to Teach," The Agricultural Education Magazine, 99 (November, 1949), 99.

[41] H. M. Hamlin, "National Conference on Research Related to Future Programs of Agricultural Education," The Agricultural Education Magazine, 22 (July, 1949), 18.

According to Sutherland, in the October, 1950 issue of Review of Educational Research,

> . . . duties and responsibilities of the agriculture teacher are constantly increasing in complexity and number. . . .
>
> . . . .
>
> In spite of its importance, relatively few studies dealt with the increasing load of duties and responsibilities of teachers of vocational agriculture.[44]

The State Education Commission of North Carolina submitted the following recommendations concerning the future programs in Agricultural Education:[45]

> That the concept of the function of the school should be broadened.
>
> That the offerings and services of the schools should be extended to meet more adequately the needs of children, youth and adults.
>
> That the high schools assume responsibility for the further education of out-of-school youths.

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[42] Vocational Education in the Years Ahead, Federal Security Agency, United States Office of Education, Vocational Division Bulletin No. 234 (Washington: Government Printing Office, 1945), pp. 123-58.

[43] J. B. Kirkland, "Difficulties Encountered by Teachers During Their First Year of Teaching Vocational Agriculture," The Agricultural Education Magazine, 20 (February, 1948), 152 ff.

[44] S. J. Sutherland, Review of Educational Research, XX (October, 1950), Chapter VIII, 330-38.

[45] "Education in North Carolina Today and Tomorrow," The Report of the State Education Commission, The United Forces for Education, Raleigh, North Carolina (Raleigh: Edwards and Broughton Co., 1948).

> That high schools develop programs designed to help adults identify and solve some of their individual and group problems, thereby improving the quality of living in communities which they serve.

In 1952 the Department of Agricultural Education at North Carolina State College released a bulletin in which it was stated:[46]

> The most urgent need in vocational agriculture today is in the young farmer program. There are two main reasons for this situation:
>
> 1. The young farmer has his problems. They are problems with which the teacher of vocational agriculture is mainly concerned — successful establishment in farming. No amount of education before or after can replace the great need of the young farmer at this critical period.
>
> 2. The teacher of vocational agriculture usually does not have his work with young farmers scheduled as part of his work day. This means that the teacher is usually not skilled in working with young farmers.

In discussing multiple teacher agricultural departments Kitts stated:[47]

> There have been continuously expanding demands upon the time and services of the teachers of vocational agriculture since the inception of the program in the secondary schools. . . . The only solutions to a good program and desired services were curtailment of services or employment of another vocational agriculture teacher.

Following a study in Texas, Boyd wrote:[48]

> There is a need for teachers of vocational agriculture to make a continuing determination of, and a continuing evaluation of, the time they devote to various activities and the distribution of this time, so they may allocate their time most

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[46] "Are His Problems My Problems?" Young Farmer Bulletin, No. 3 (Raleigh: Department of Agricultural Education, School of Education, North Carolina State College, 1952), p. 64 (Mimeographed).

[47] H. W. Kitts, "Multiple Teacher Departments," The Agricultural Education Magazine, 23 (June, 1951), 275, 283, 285.

[48] Boyd, op. cit.

> effectively. There is a need for a thorough comprehensive study of the activities of teachers of vocational agriculture, the time devoted to these activities, and the distribution of this time in order to assist teachers in making the most effective allocation of their time.

Hill concluded, after studying the time used for professional activities by West Virginia teachers of vocational agriculture, that either additional teachers must be provided in most departments, or that a careful evaluation be made of present and contemplated activities.[49]

In a North Carolina study the agriculture teacher is classified "a community handyman" and the investigator concluded:[50]

> Whether or not the teacher's energies were expended in the manner in which the Federal or State governments intended . . . the teacher works more hours than either should expect. Thus the vocational agriculture teacher's work is entirely too long.

The situation is not made less gloomy when the North Carolina Education Commission report is reviewed. While there were 358 white teachers of agriculture in the state, 519 were needed to reach those now in school and 858 teachers were needed to reach all white male youth 13-17 years old in the state.[51] This needed expansion is approximately in line with the situation reported in a Nebraska study in which the author recommended a possible 100 per cent expansion, in the number of vocational agriculture departments in that state, with additional state or federal government assistance.[52]

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[49] Hill, op. cit.

[50] Wall, op. cit.

[51] "Education in North Carolina Today and Tomorrow," op. cit.

[52] H. E. Bradford, The Expansion of Vocational Education in

Vocational Agricultural Education for Adults Endorsed by Lay Constituents and the Agricultural Education Profession

Many studies and reports have dealt with the need for and the value of classes in vocational agriculture for adults.

In a study of 88 young farmers in Ohio, according to the most careful estimates of both teachers and young farmers, the increase in net worth due to the teacher's help during the four years was $2,012.80 per young farmer.[53] Needless to say, herein lies a strong selling point for adult education in agriculture. Three-fifths of 330 veteran trainees in Arkansas stated that they would be willing to pay taxes to support such a program (without subsistence) in the future.[54] In North Carolina 96.3 per cent of the (more than 25,000) veteran farmer trainees enrolled in 1948 expressed further interest in training after expiration of their entitlement.[55]

The American Vocational Association very clearly states its views regarding young and adult farmer education in agriculture.[56]

Nebraska, Contributions to Education No. 22 (Lincoln: University of Nebraska, 1945).

[53] W. H. Wolf, "How Teachers Assist Young Farmers to Increase Their Net Worth" (Columbus: Department of Agricultural Education, Ohio State University, 1942), p. 129.

[54] H. G. Hotz, "An Evaluation of the Institutional On-farm Training Program in Arkansas," The Agricultural Education Magazine, 23 (July, 1951), 20, 23.

[55] Summary of Veterans Farm Training Study, Miscellaneous Publication 3301. Federal Security Agency, Office of Education (Washington: Government Printing Office, 1948), p. 18.

[56] Education of Veterans in Farming, Report of a Nationwide Study of the Institutional On-farm Training Program, American Vocational Association, Inc. (Washington: 1952).

> Particular attention should be given to the farmer education phase of the regular (vocational agriculture) program. More recognition should be given to the teacher of agriculture who is competent in establishing young men in farming. The job of the teacher of agriculture takes on new stature and importance as one sees the possibility of his serving increasingly as a supervisor of special instructors and a co-ordinator of farm placement and establishment. This service may well be called life adjustment education.

From the standpoint of administering vocational education, the Office of Education states:[57]

> The Office of Education believes it is the responsibility of the teacher of vocational agriculture to consider part-time and evening classes a definite part of his whole program of instruction, it believes also in the principle of compensation for the services rendered.

From the Office of the North Carolina State Superintendent of Instruction came the following statement in 1951:[58]

> Too much emphasis cannot be placed upon this fact: The teacher of vocational agriculture has a responsibility for providing organized instruction for the out-of-school group equally as great as his responsibility for teaching high school students. Such emphasis is placed first in the statement of policies by the U. S. Office of Education.

In the nation-wide American Vocational Association study, 73.8 per cent (of the 5,274 farm veterans) had never been enrolled in a high school class in vocational agriculture . . . . they indicated, almost universally, that four years of concentrated study as young farmers would not be enough for the remainder of their lives. They wanted continued educational opportunities for themselves and their families.[59]

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[57] Office of Education, Federal Board for Vocational Education, General Series 1, Bulletin 1, Revised February 1937, pp. lx-137.

[58] State Department of Public Instruction, op. cit.

The nation-wide endorsement of the Veteran Farmer Training Program by the enrollees in the program has given impetus to the movement for an enlarged program for adult education in agriculture. It was felt by 92 per cent of the 5,274 men studied that the public school program should include agriculture for adults. Almost three-fourths of the veterans would be willing to pay from $10 to $50 for tuition per year for a suitable educational program following the expiration of the program for veterans. One-third of the men who are willing to pay for instruction preferred a charge of $5 to $10 per year. Ten per cent of the group would pay no tuition for the support of agricultural instruction programs for adult farmers.[60]

National agricultural education leaders have contended for years that improved and more readily available instruction in vocational agriculture would greatly reduce the number of prior-to-graduation school leavers and would be a strong drawing card for causing past "drop-outs" to return to school.[61]

The chairmen of agricultural education teacher training departments in the nation recently ranked "teaching a young farmer class" and "teaching an adult farmer class" as third and fifth respectively according to their importance as duties of the agricultural teacher.

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[59] Education of Veterans in Farming, op. cit.

[60] Ibid.

[61] H. M. Hamlin and G. P. DeYoe, "Agricultural Education," Encyclopedia of Educational Research, ed. by W. S. Monroe (New York: The Macmillan Co., 1950), p. 41.

They regarded lack of teacher time as the greatest problem in further developing the young farmer program.[62]

As a result of a study in Vermont, Cushman lists the following as the main reasons that so few vocational agriculture teachers are conducting young farmer programs:[63]

1. Lack of promotion
2. Lack of teacher time
3. Lack of know-how
4. Negative attitude

Neglect of Young and Adult Farmers Apparent

The literature indicates, despite the recognition of its importance, that work with adults receives a very small proportion of the vocational agricultural teacher's time. Louisiana teachers, for example, reported having devoted 16.18 per cent of their time to classroom teaching (all day) and 1.73 per cent to evening class instruction.[64] Knuti in a summary of a study of 377 teachers of agriculture in eight Pacific Region states found that while 35 per cent of the teacher's time was spent on high school activities, 7 per cent was spent on young farmers and adult farmer classes combined.[65] Winter reported West Virginia teachers of agriculture were spending 50.56 per cent of their time on classroom preparation and teaching and 6.55 per cent on evening schools.[66] In Ohio even though young farmer groups were large, sometimes ten times larger, than the high school enrollment, the teachers of agriculture spent 4 per cent of their time on young farmers and adult farmers combined.[67]

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[62] "The Training of Prospective Teachers of Vocational Agriculture for Young Farmer Education" (Madison, Wisconsin: Department of Agricultural Education, University of Wisconsin, 1953), p. 6 (Mimeographed).

[63] H. R. Cushman, "Here is What's Holding Up Our Young Farmer Program," County Agent and Vo-Ag Teacher, 8 (February, 1952), 22.

[64] R. L. Davenport, "How Teachers of Vocational Agriculture in Louisiana Distribute Their Time" (Unpublished Doctor's Thesis, Department of Agricultural Education, Cornell University, 1930), p. 108.

[65] L. L. Knuti, "Use of Time by Teachers of Vocational

A publication from the Department of Agricultural Education, North Carolina State College, mentions the neglect of the out-of-school classes in agriculture, stating that out of 263,370 potential enrollees in young farmer and adult farmer classes less than 11,000 of these individuals were actually enrolled in young farmer and adult farmer classes in 1940, the year of peak enrollment in such classes in North Carolina. In 1948 the combined enrollment in these two classes was about 5,000 individuals.[68]

Naugher reports:[69]

Agriculture in Months" (Unpublished Report, Department of Agricultural Education, Montana State College, 1952).

[66] R. E. Winter, "A Study of Salary Cost of Vocational Agriculture in the Rural High Schools of West Virginia" (Master's Special Study, West Virginia University, 1935), p. 53.

[67] G. S. Guiler, "Ear-Marked Time for Adult Education," The Agricultural Education Magazine, 25 (May, 1953), 245, 249.

[68] "Young Farmers" (Raleigh: Department of Agricultural Education, School of Education, North Carolina State College, 1950), p. 19 (Mimeographed).

[69] J. R. Coxen et. al., "On-the-Job Training in Vocational Education," On-the-Job Education in Rural Communities, Yearbook, Department of Rural Education, National Education Association of the United States (Washington: Government Printing Office, February, 1947), p. 69.

In 1940 in the United States as a whole, there were more young farmers (14-25 years of age, out of school) than there were boys enrolled in the regular vocational agriculture classes in high school. These young men needed some assistance in getting established in farming.

According to Hamlin:[70]

> Young farmer studies have shown uniformly that there are large numbers of . . . youth, that their general education as well as their agricultural education has been limited, and that most of them wish to return to school provided appropriate instruction can be obtained. In spite of these facts, the numbers enrolled in part-time (young farmer) classes in agriculture remained nearly negligible till the present decade. Since 1930 there has been an increase of approximately 1000 per cent in the enrollment of such classes, but in 1937-38 only about 5 per cent of those eligible were enrolled.

Addressing the 1952 Annual Conference, North Carolina Teachers of Vocational Agriculture, the Head of the Department of Agricultural Education at North Carolina State College said:[71]

> Last year less than one-half of you conducted young farmer classes--in fact, about 45 per cent. One rather startling fact is that you reported 2,858 young farmers in organized instruction last year, while you reported 28,904 former veteran enrollees were still farming, half of these as renters or croppers. Studies have indicated that most of these young farmers want further training.

School Personnel Poorly Prepared for Adult Education Work

Several studies indicate that agricultural teachers and other school personnel have not been properly prepared for working with adult groups. Five of the studies are reviewed below:

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[70] H. M. Hamlin, Encyclopedia of Educational Research (New York: The Macmillan Co., 1941), p. 36.

[71] C. C. Scarborough, "Young Farmers--A Challenge to Teachers of Vocational Agriculture." Talk given at Annual Conference North Carolina Teachers of Vocational Agriculture, Carolina Beach, North Carolina, June, 1952.

In Alabama it was found that the experience received in the agricultural teacher's preparation in the area of teaching high-school classes was the most comprehensive. The area of teaching adult classes ranked very low in actual participating experiences.[72] Florida agricultural teachers stressed needing supervisory help in arranging with the principal for a desirable class schedule, organizing and teaching a class of young farmers, and organizing and teaching a class of adult farmers.[73] In a Missouri study of professional and technical difficulties encountered by teachers during their first year of teaching vocational agriculture, 45 per cent reported unusual difficulty in professional activities such as organizing and teaching adult classes.[74] In a 1952 survey of the superintendents of schools in North Carolina 65 per cent of the individuals in the study reported that pre-service training in evening classes for adult education needed more attention.[75] In Scarborough's study in North Carolina, the 100 recent agricultural education graduates were found to feel inadequately trained to develop out-of-school programs in the community . . . . particularly noticeable in the reactions of some groups was an evident lack of understanding of the major purposes of a program of vocational agriculture in a community. This seemed to be the case even with farm boys enrolled in vocational agriculture.[76]

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[72] T. W. Gandy, "A Study of the Comprehensiveness of the Teacher Training Program in Agricultural Education in Alabama" (Unpublished Master's thesis, Department of Agricultural Education, Alabama Polytechnic Institute, 1950), p. 89.

[73] E. W. Garris, "Supervisory Needs of Beginning Teachers," The Agricultural Education Magazine, 25 (April, 1953), 231.

[74] D. B. Hutson, "Professional and Technical Difficulties Encountered by Teachers During Their First Year of Teaching Vocational Agriculture" (Nonthesis Study, Department of Agricultural Education, University of Missouri, 1950), p. 30.

[75] E. C. Bolmeir, "Superintendents Appraise Pre-Service Training," The School Executive, 71 (July, 1952), 42 ff.

Shift in Emphasis Advocated

As if literally interpreting the objective of vocational education in agriculture, "to train present and prospective farmers for proficiency in farming," in which adults are referred to first, a shift in emphasis on the phases of the program are being urged by some in the profession. Perhaps strength for this argument can be found in a nation-wide study which indicated:[77]

> The percentage of ex-students who took agriculture in the high school and are now engaged in farming is declining . . . Teachers of agriculture probably need to use more of their time in giving educational assistance to young and adult farmers who are already engaged in agriculture.

Howard states:[78]

> Most school administrators favor the all-day group, but many are coming to the philosophy that young farmers and adults are the proof of the pudding and we should hold on to our all-day boys until they are ready to retire.

Kitts, a leader in the shift-in-emphasis movement, found in a study of 800 veterans in a rural New York area that, while one-half of the young men were residing on farms prior to induction, only one-fourth of the group who attended high school took vocational agriculture and less than one-fifth of those who took vocational agriculture in high school were farming in 1947.[79] Thus, in this particular study, it was found that only 20 per cent of the boys having agriculture in high school were farming, and, in addition, a considerable proportion of those farming had had no training in high school vocational agriculture.

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[76] C. C. Scarborough, "A Proposed Program of Education for Prospective Teachers of Vocational Agriculture in North Carolina" (Unpublished Doctor's thesis, Department of Agricultural Education, University of Illinois, 1951).

[77] E. W. Garris, "Future Farmers of America," The Agricultural Education Magazine, 24 (November, 1951), 119.

[78] Howard, op. cit.

A bulletin based on the evaluative criteria prepared by the National Committee on Standards in Agricultural Education, after summarizing evaluations of 396 local programs of vocational agriculture, contains the following concerning the "distribution and amount of time for instruction:"[80]

> There is a sharp break between the very superior and superior programs and the other programs. The former programs have young farmer instruction extending over a period of from 4 to 6 years leading to satisfactory establishment in farming. The average, inferior, and very inferior programs have little or no young farmer instruction.
>
> . . . .
>
> The follow-up and establishment of young men in farming is the weakest part of the vocational agriculture program.

Sasman wrote of a program conducted in Wisconsin in 1941, in which six teachers of vocational agriculture devoted their full time to young farmer classes.[81]

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[79] H. W. Kitts, "Educational and Occupational Readjustment of Rural Veterans," Rural Education Bulletin (Ithaca, New York: Cornell University, June 1949), p. 43.

[80] An Evaluation of Local Programs of Vocational Education in Agriculture, Vocational Division Bulletin No. 240, Agricultural Series No. 58, Federal Security Agency, Office of Education (Washington: Government Printing Office, 1949), p. 30.

[81] L. M. Sasman, "Full-time Instructors for Young Farmers Classes," The Agricultural Education Magazine, 13 (April, 1941), 198.

> The trend in Wisconsin is toward the gradual development of part-time programs of young farmer classes, with instructors giving their full time to this work. The day classes thus made possible provide better opportunity for a practical program of study. The fact that in this type of program the classes for young farmers come first, accords the recognition that is due to the true type of instruction in vocational agriculture that can be given to older boys and young men out of school.

Mark Nichols, one of the more widely recognized advocates of an enlarged and an improved vocational agriculture program for young farmers, has termed young farmer work "the challenge of the hour to vocational agricultural leadership." Nichols sees the complete program of vocational agriculture as a wheel, the hub of which is the high school enrollment and the rim being the adult farmers. The young farmers are the spokes connecting the hub and the rim. "It is the spokes, that will, to a great extent determine the success or failure of vocational agriculture in the future."[82]

Summary

The literature reviewed in this chapter indicates that agricultural teachers, though working long hours, are not in all cases meeting the legal obligations which require an instructional program for adults in agriculture. Although adult education in vocational agriculture is endorsed by lay and professional people alike, adults in vocational agriculture are being neglected. Some school personnel feel inadequately prepared to offer instruction to adults. Several studies indicate that some agricultural teachers are spending time attending to non-agricultural duties. To make the future less bright there are reports which indicate that the agricultural teacher's duties are steadily increasing, both in number and complexity. Of very great importance, in the opinion of some in vocational agriculture, is the fact that a decreasing percentage of boys who take vocational agriculture in high school go into farming as a vocation while a large percentage (in one nation-wide study, 73 per cent) of young men who are now farming did not take vocational agriculture in high school.

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[82] Mark Nichols, The Young Farmer Program, Bulletin (Danville: The Interstate, 1951), p. 41.

There are several studies which recommend a re-examination of the entire vocational agricultural program. In some cases a shift in emphases in vocational agriculture is advocated.

CHAPTER III

PRESENTATION AND INTERPRETATION OF DATA

Information secured from the four population groups in this study is presented in Chapter III. All the data were treated arithmetically and, for those data obtained from a question which requested a ranking, either "t's" or chi-squares were run to determine the levels of significance of the differences in mean ranks.

Ranking of Future Programs

In treating the ranking of the future programs, the following letters will be used in lieu of the appropriate program:

Letter	Program
A	High school instruction for 2 years, using the time so saved for young and adult farmers
B	High school instruction for 4 years and give any time left to young and adult farmers
C	Increase the number of teachers to provide needed instruction for all types of classes--high school, young and adult farmer
D	Allow only those boys who appear likely to farm to take agriculture in high school, and eliminate any person at the end of the first year if he had not started an acceptable supervised farming program. This should give the agricultural teacher more time for work with the young and adult farmers.

The ranking of the programs by the four population groups in the study is presented in Tables 2, 3, 4, and 5. The following code will be used in each:

F	Farmers
T	Teachers
S	Superintendents
S-H	Supervisors and Heads
O	Observed frequency
E	Expected frequency

Table 2 gives the ranking of Program A by the four hundred individuals comprising the four population groups in the study.

TABLE 2

THE RANKING OF PROGRAM A, "TWO YEARS OF HIGH SCHOOL INSTRUCTION" BY THE FOUR HUNDRED INDIVIDUALS IN THE STUDY

	Number Ranking Program A								
	1		2		3		4		
Group	O	E	O	E	O	E	O	E	Obsvd Totals
F	16	13.5	28	24.4	39	41.9	49	52.1	132
T	13	10.1	15	18.3	27	31.4	44	39.1	99
S	10	7.8	19	14.1	29	24.1	18	30.0	76
S-H	2	9.5	12	17.2	32	29.5	47	36.7	93
Totals	41	40.9	74	74.0	127	126.9	158	157.9	400

MEAN RANK: 3.0050
CHI-SQUARE: 22.754 (**)

**Significant at the 1 per cent level

When a chi-square is calculated for the ranks assigned Program A by the four groups in this study, it is found that the different groups did not rank Program A the same. The differences in these ranks, as shown in Table 2, are significant at the 1 per cent level.

Table 3 gives the ranking of Program B by the four hundred individuals comprising the four population groups in this study.

TABLE 3

THE RANKING OF PROGRAM B, "PRESENT PROGRAM," BY THE FOUR HUNDRED INDIVIDUALS IN THE STUDY

	Number Ranking Program B								
	1		2		3		4		Obsvd
Group	O	E	O	E	O	E	O	E	Totals
F	33	34.0	43	38.0	34	31.4	22	28.7	132
T	27	25.5	25	28.5	22	23.5	25	21.5	99
S	32	19.6	21	21.9	15	18.1	8	16.5	76
S-H	11	23.9	26	26.7	24	22.1	32	20.2	93
Totals	103	103.0	115	115.1	95	95.1	87	86.9	400

MEAN RANK: 2.4150
CHI-SQUARE: 30.479 (**)

**Significant at the 1 per cent level

Table 3 indicates that Program B was ranked differently by the four hundred individuals in this study and that these differences in the rankings are significant at the 1 per cent level.

Table 4 gives the ranking of Program C by the four hundred individuals comprising the four population groups in this study.

With a chi-square of 82.752 Table 4 indicates that the differences in the ranking of Program C are very significant at the 1 per cent level.

TABLE 4

THE RANKING OF PROGRAM C, "MORE AGRICULTURAL TEACHERS," BY THE FOUR HUNDRED INDIVIDUALS IN THE STUDY

	Number Ranking Program C								
	1		2		3		4		
Group	O	E	O	E	O	E	O	E	Obsvd Totals
F	40	47.9	26	31.0	40	33.7	26	19.5	132
T	22	35.9	33	23.3	33	25.2	11	14.6	99
S	18	27.6	18	17.9	18	19.4	22	11.2	76
S-H	65	33.7	17	21.9	11	23.7	0	13.7	93
Totals	145	145.1	94	94.1	102	102.0	59	59.0	400

MEAN RANK: 2.1875
CHI-SQUARE: 82.752 (**)

**Significant at the 1 per cent level

Table 5 gives the ranking of Program D by the four hundred individuals comprising the four population groups in the study.

Table 5 indicates that the differences in the ranking of Program D (as were the differences in the ranking of Program A, B, and C) are significant at the 1 per cent level. The four population groups do not rank the programs the same.

Note: Frequency distributions for the data in Tables 6, 7, 8, 9, and 10 (in the following section) are presented in Tables 2, 3, 4, and 5. Table 2 contains the observed frequencies of the ranking of

TABLE 5

THE RANKING OF PROGRAM D, "GREATER SELECTIVITY OF HIGH SCHOOL STUDENTS," BY THE FOUR HUNDRED INDIVIDUALS IN THE STUDY

	Number Ranking Program D								
	1		2		3		4		Obsvd
Group	O	E	O	E	O	E	O	E	Totals
F	42	36.0	37	38.6	19	27.1	34	30.4	132
T	36	27.0	25	29.0	21	20.3	17	22.8	99
S	16	20.7	18	22.2	14	15.6	28	17.5	76
S-H	15	25.3	37	27.2	28	19.1	13	21.4	93
Totals	109	109.0	117	117.0	82	82.1	92	92.1	400

MEAN RANK: 2.3925
CHI-SQUARE: 33.458 (**)

**Significant at the 1 per cent level

Program A by each of the four groups in the study. Table 3 contains the observed frequencies of the ranking of Program B by each of the four groups in the study. Table 4 contains the observed frequencies of the ranking of Program C by each of the four groups in the study. Table 5 contains the observed frequencies of the ranking of Program D by each of the four groups in the study.

The rankings of the future programs of vocational agriculture are presented, by population groups, in the following order: farmers, agricultural teachers, county superintendents of schools, and heads of departments of agricultural education in various colleges and state supervisors of agricultural education. Table 6 contains the farmers' mean ranking of each program, the "t" values, levels of significance of the differences in mean ranks, and standard deviations.

TABLE 6

ONE HUNDRED AND THIRTY-TWO NORTH CAROLINA FARMERS' RANKING OF FUTURE VOCATIONAL AGRICULTURAL PROGRAMS ACCORDING TO THEIR VALUE TO THE COMMUNITY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Program	t Values and Levels of Significance		
			B	C	D
2.9166	1.0305	A	4.526	3.942	4.221
			**	**	**
2.3409	1.0291	B		0.400	0.000
				NS	NS
2.3939	1.1131	C			0.375
					NS
2.3409	1.1735	D			

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

In Table 6 it is seen that Program A, "two years of high school instruction . . .," is the fourth choice of the farmers. Also it is noted that the differences in the mean rank of Program A and the mean ranks of Programs B, C, and D are all significant at the 1 per cent level. The differences in mean ranks for the other programs were found to be not significant at the 5 per cent level.

Table 7 contains the agricultural teachers' mean ranking of each program, "t" values, levels of significance of the differences in mean ranks, and standard deviations.

TABLE 7

NINETY-NINE NORTH CAROLINA AGRICULTURAL TEACHERS' RANKING OF FUTURE VOCATIONAL AGRICULTURAL PROGRAMS ACCORDING TO THEIR VALUE TO THE COMMUNITY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Program	t Values and Levels of Significance		
			B	C	D
3.0303	1.0584	A	3.665	4.867	5.420
			**	**	**
2.4545	1.1397	B		0.811	1.636
				NS	NS
2.3333	0.9482	C			0.963
					NS
2.1919	1.1072	D			

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

Like the farmers, the teachers ranked Program A, "two years of high school instruction . . .," as fourth. As with the farmers also, the differences in the mean rank assigned Program A by the teachers, and the mean ranks of Programs B, C, and D are all significant at the 1 per cent level. The differences in mean ranks for the other programs were found to be not significant at the 5 per cent level.

Table 8 contains the ranking given the future vocational agricultural program by the county superintendents of schools (including "t" values, and levels of significance of the differences in mean ranks and standard deviations).

TABLE 8

SEVENTY-SIX NORTH CAROLINA COUNTY SCHOOL SUPERINTENDENTS' RANKING OF FUTURE VOCATIONAL AGRICULTURAL PROGRAMS ACCORDING TO THEIR VALUE TO THE COUNTY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Program	t Values and Levels of Significance B	C	D
2.7236	0.9680	A	4.540	0.838	0.075
			**	NS	NS
1.9868	1.0194	B		3.355	4.043
				**	**
2.5789	1.1387	C			0.699
					NS
2.7105	1.1679	D			

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

As Table 8 indicates, superintendents ranked as first Program B which is essentially the present program in operation in North Carolina and consists of four years of instruction for high school students and the teacher devoting any of his time that might be left to young and adult farmers. The differences in the mean rank assigned Program B and the mean ranks of Programs A, C and D are all significant at the 1 per cent level. The differences in mean ranks for the other programs were found to be not significant at the 5 per cent level.

Table 9 contains the ranking given the future vocational agricultural programs by the state supervisors of and heads of agricultural education departments ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 9

NINETY-THREE UNITED STATES (AND TERRITORIES) AGRICULTURAL EDUCATION STATE SUPERVISORS' AND AGRICULTURAL EDUCATION DEPARTMENT HEADS' RANKING OF FUTURE VOCATIONAL AGRICULTURAL PROGRAMS ACCORDING TO THEIR VALUE TO THE STATE, WITH THE MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Program	t Values and Levels of Significance		
			B	C	D
3.3333	0.7807	A	3.744 **	17.592 **	7.266 **
2.8279	1.0332	B		10.860 **	2.833 **
1.4193	0.6930	C			8.333 **
2.4193	0.9197	D			

**Significant at the 1 per cent level

As seen in Table 9, of the four population groups in the study the state supervisors of and heads of agricultural education departments had the greatest spread between their first and fourth place program rankings. The differences in the mean ranks assigned the four programs by this group are, in every case, significant at the 1 per cent level. This high level of significance perhaps reflects the keen interest shown in future programs in the agricultural education literature.

Table 10 contains the combined mean ranking (and "t" values, levels of significance of the differences in mean ranks, and standard deviations of each program by the four groups in the study).

TABLE 10

MEAN RANKING OF EACH PROGRAM BY THE FOUR GROUPS IN THE STUDY COMBINED

Mean Rank	Standard Deviation	Program	t Values and Levels of Significance		
			B	C	D
3.0050	.9950	A	7.973	11.107	8.189
			**	**	**
2.4150	1.0922	B		2.955	0.288
				**	NS
2.1875	1.0826	C			2.635
					**
2.3925	1.1149	D			

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

Table 10 indicates that the differences in all of the combined mean ranks, except for the differences in Program B and Program D, are significant at the 1 per cent level. The four hundred individuals in the study ranked the programs according to value, with most valuable first: C (more agricultural teachers), D (greater selectivity of high school students), B (present program) and A (two years of high school instruction).

Other Program Alternatives

All four population groups in the study were given an opportunity to suggest program alternatives in addition to the four which they were requested to rank. The following suggestions were made:

1. Give instruction to all boys the first year. Allow only those appearing likely to farm to register the second year. Eliminate any not having started acceptable practices at the end of the second year. Give instruction to those starting acceptable practices for four years. If there is any time left, give it to young and adult farmers.
2. Since the Agricultural Extension Service works with young adult farmers, agriculture teachers should spend at least 3/4 of their time with high school boys.
3. Give instruction to 7th and 8th grade pupils.
4. Give at least 2 full week days to young and adult farmers.
5. Use 1/2 day for high school students and the other half for young and adult farmers.
6. Offer high school instruction in agriculture for 3 years.
7. Extend all-day program to include training for related agricultural occupations as well as farming (teaching vo-ag., extension work, feed salesmen, other service occupations).
8. In departments of 40 or less pupils — combine 1st and 2nd year students, and 3rd and 4th year students. Devote 1/2 day to teaching these 2 classes and the rest of time to young farmers and adult farmers.
9. Give junior high school instruction to male students and give any time left to young and adult farmers.
10. Part-time cooperative classes combined with all-day, young and adult farmer classes. The part-time cooperative . . . combines features of the all-day and young farmer programs.
11. A combination of alternatives 3 and 4 on the questionnaire.

Classes Ranked According to Their Value and Contribution to the Agricultural Teacher's Success

In this section the following symbols will serve in lieu of the appropriate classes:

HS - High School

YF - Young Farmer

AF - Adult Farmer

Table 11 gives the ranking by the farmers of the three vocational agricultural classes according to their value ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 11

ONE HUNDRED AND THIRTY-ONE NORTH CAROLINA FARMERS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR VALUE TO THE COMMUNITY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance Class	YF	AF
1.6870	.8204	HS	1.336	8.179
			NS	**
1.8015	.5304	YF		8.401
				**
2.5114	.8044	AF		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

Table 11 indicates that the differences in the mean rank of the Adult Farmer class and in the mean ranks of both of the other two classes are significant at the 1 per cent level. The difference in the mean rank of the High School class and in the mean rank of the Young Farmer class is not significant at the 5 per cent level. It would appear that the farmers are quite certain that the Adult Farmer class should have third place, but that they do not feel as strongly toward which class (High School or Young Farmer) deserves first place.

Table 12 gives the ranking by the teachers of the three vocational agricultural classes according to their value ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 12

NINETY-NINE NORTH CAROLINA AGRICULTURAL TEACHERS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR VALUE TO THE COMMUNITY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Class	YF	AF
1.7979	.7653	HS	1.510	7.809
			NS	**
1.6363	.7312	YF		9.685
				**
2.5757	.6213	AF		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

According to Table 12 the teacher, like the farmers, placed the Adult Farmer class third. Like the farmers, their rankings gave differences in the mean rank of the Adult Farmer class and in the mean ranks of the other two classes which are significant at the 1 per cent level. The teacher, however, placed the Young Farmer class first in value to the community, giving second place to the High School class. The difference in the mean rank of the Young Farmer class and in the mean rank of the High School class, however, is not significant at the 5 per cent level.

Table 13 gives the ranking by the superintendents of the three vocational agricultural classes according to their value to the county ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 13

SEVENTY-SIX NORTH CAROLINA COUNTY SCHOOL SUPERINTENDENTS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR VALUE TO THE COUNTY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Class	YF	AF
1.1447	.4201	HS	12.771 **	23.575 **
2.0131	.4135	YF		11.594 **
2.8421	.4603	AF		

**Significant at the 1 percent level

Table 13 indicates that the County superintendents of schools had a stronger feeling toward the value of the three classes than did the farmers or the teachers. The superintendents placed the classes in order of value with most valuable first: High School, Young Farmer and Adult Farmer. The differences in the mean ranks of the classes are, in all three cases, significant at the 1 per cent level.

Table 14 gives the ranking of the three vocational agricultural classes according to value by United States (and Territories) state supervisors of and heads of agricultural education departments ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 14

NINETY-THREE UNITED STATES (AND TERRITORIES) AGRICULTURAL EDUCATION STATE SUPERVISORS' AND AGRICULTURAL EDUCATION DEPARTMENT HEADS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR VALUE TO THE STATE, WITH THE MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Class	t Values and Levels of Significance YF	AF
1.2688	.5514	HS	12.190	12.125
			**	**
2.4086	.7068	YF		0.875
				NS
2.3225	.6252	AF		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

According to Table 14 the agricultural education specialists in this study feel very definitely that the High School class is the most valuable class to their respective states. The differences in the mean ranks of the High School and the other two classes are, in both cases, significant at the 1 per cent level. This particular population group regards the Adult Farmer class as of slightly more value than the Young Farmer class, the differences in the mean ranks of these two latter classes, however, is not significant at the 5 per cent level.

It should be noted that the first place ranking for the High School class by all four groups might be attributed in part to the fact that vocational agricultural high school enrollments overshadow those of adults in vocational agriculture. The high school class may have been ranked most valuable because there are more high school classes than adult classes, and consequently many more students and ex-students of high school vocational agriculture classes than of adult vocational agriculture classes.

The second place ranking for Adult Farmer classes and the third place ranking for young farmer classes could be interpreted as recognition (by the state supervisors and heads of agricultural education) of the widespread neglect of the young farmer group. Documentation of this neglect was made in Chapter II.

Table 15 gives the ranking by the farmers, of the three vocational agricultural classes according to their contributions to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

The farmers ranked the classes, with the one contributing most to the agricultural teacher's success listed first: High School, Young Farmer and Adult Farmer. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

TABLE 15

ONE HUNDRED AND THIRTY-TWO NORTH CAROLINA FARMERS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH CLASS CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Class	YF	AF
1.3106	.5523	HS	8.227	23.346
			**	**
1.8939	.5936	YF		13.597
				**
2.7954	.4728	AF		

**Significant at the 1 per cent level

TABLE 16

NINETY-NINE NORTH CAROLINA AGRICULTURAL TEACHERS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH CLASS CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Class	YF	AF
1.3737	.6604	HS	7.843	12.056
			**	**
2.1313	.6912	YF		3.819
				**
2.4949	.6417	AF		

**Significant at the 1 per cent level

Table 16 gives the ranking by the agricultural teachers of the three vocational agricultural classes according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

The teachers ranked the classes, with the one contributing most to the agricultural teacher's success listed first: High School, Young Farmer and Adult Farmer. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

Table 17 gives the ranking by the County Superintendents of schools of the three vocational agricultural classes according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 17

SEVENTY-FIVE NORTH CAROLINA COUNTY SCHOOL SUPERINTENDENTS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH CLASS CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	Class	t Values and Levels of Significance YF	AF
1.1466	.4531	HS	12.670 **	23.338 **
1.9866	.3464	YF		13.456 **
2.8666	.4426	AF		

**Significant at the 1 per cent level

The county superintendents were in agreement with the farmers and teachers in ranking the classes, in order of contributing to the success of the agricultural teacher: High School, Young Farmer and Adult Farmer. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

Table 18 gives the ranking by the state supervisors of and heads of agricultural education departments of the three vocational agricultural classes according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 18

NINETY-THREE UNITED STATES (AND TERRITORIES) AGRICULTURAL EDUCATION STATE SUPERVISORS' AND AGRICULTURAL EDUCATION DEPARTMENT HEADS' RANKING OF VOCATIONAL AGRICULTURAL CLASSES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH CLASS CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance Class	YF	AF
1.4086	.7219	HS	8.771	11.140
			**	**
2.3225	.6906	YF		0.270
				NS
2.3444	.3569	AF		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

The agricultural education specialists placed the classes in the same order as the other three population groups. The specialists' ranking of the Young Farmer and Adult Farmer classes yielded, however, a difference of mean ranks which is not significant at the 5 per cent level. The differences in the mean rank of the High School class and in the mean ranks of the other two classes is significant at the 1 per cent level.

Activities Ranked According to Their Value and Contribution to the Agricultural Teacher's Success

In this section the following symbols will be used in lieu of the appropriate activity:

CI - Classroom Instruction
OF - On-farm Instruction and Supervision
CS - Community Service

TABLE 19

ONE HUNDRED AND THIRTY-ONE NORTH CAROLINA FARMERS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR VALUE TO THE COMMUNITY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Activity	OF	CS
1.8396	.7993	CI	0.158	5.398
			NS	**
1.8244	.7565	OF		5.711
				**
2.3664	.7738	CS		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

Table 19 gives the ranking of the farmers of three of the agricultural teachers' activities according to the value of the activities ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

The differences in the mean ranks of Community Service (placed third) and in the mean ranks of the other two activities are significant at the 1 per cent level. The difference in the mean rank of Classroom Instruction and in the mean rank of On-farm Instruction and Supervision is not significant at the 5 per cent level, with the latter activity having a mean rank .0152 lower than the mean rank for Classroom Instruction. Apparently the farmers regard Classroom Instruction and On-farm Instruction and Supervision as being of almost equal value.

Since the question dealing with the relative importance of three of the agricultural teacher's activities was asked the agricultural teacher group in a slightly different wording from the manner in which it was asked the other three population groups, the results are reported in Table 20 as the percentage of time deserved by each activity and the percentage of time that each activity received in 1951-52.

It appears from Table 20 that Classroom Instruction and Community Service received more of the agricultural teacher's time than those activities deserved, at the expense of On-farm Instruction and Supervision, according to the teachers.

Table 21 gives the ranking, by the school superintendents, of three of the agricultural teacher's activities, according to value ("t" value, levels of significance of the differences in mean ranks, and standard deviations are included).

The county school superintendents regard the activities in order of value, with most valuable first: Classroom Instruction,

TABLE 20

NORTH CAROLINA AGRICULTURAL TEACHERS' ESTIMATE OF THE PERCENTAGE OF TIME DESERVED BY THREE ACTIVITIES AND THE AMOUNT OF TIME RECEIVED BY EACH ACTIVITY IN 1951-52

Activity	% Time Deserved	% Time Received
Classroom Instruction	53.2	59.6
On-farm Instruction and Supervision	29.8	21.8
Community Service	16.9	18.5

TABLE 21

SEVENTY-SIX NORTH CAROLINA COUNTY SCHOOL SUPERINTENDENTS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR VALUE TO THE COUNTY, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Activity	OF	CS
1.1710	.4700	CI	10.935 **	23.608 **
1.9605	.4117	OF		13.551 **
2.8684	.4087	CS		

**Significant at the 1 per cent level

On-farm Instruction and Supervision, and Community Service. The differences among the assigned ranks are much greater for the superintendents' answers than for those of the farmers. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

Table 22 gives the ranking of three of the agricultural teacher's activities, according to value by the United States (and Territories) state supervisors of and heads of agricultural education departments ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 22

NINETY-TWO UNITED STATES (AND TERRITORIES) AGRICULTURAL EDUCATION STATE SUPERVISORS' AND AGRICULTURAL EDUCATION DEPARTMENT HEADS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR VALUE TO THE STATE, WITH MOST VALUABLE RANKED LOWEST

Mean Rank	Standard Deviation	Activity	t Values and Levels of Significance	
			OF	CS
1.5217	.5986	CI	1.470 NS	15.906 **
1.6521	.5979	OF		14.316 **
2.8260	.5028	CS		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

The agricultural education specialists assigned a definite third place to Community Service, giving a mean rank to that activity which has a difference, when compared to either of the other two activities, that is significant at the 1 per cent level. The difference in the mean ranks of Classroom Instruction (first place) and On-farm Instruction and Supervision is not significant at the 5 per cent level.

Table 23 gives the farmers' ranking of three of the agricultural teacher's activities, according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 23

ONE HUNDRED AND THIRTY-ONE NORTH CAROLINA FARMERS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH ONE CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	t Values and Levels of Significance		
		Activity	OF	CS
1.6183	.7147	CI	2.833	10.063
			**	**
1.8778	.7617	OF		6.887
				**
2.5038	.7031	CS		

**Significant at the 1 per cent level

Table 23 indicates that according to the activities contribution to the agricultural teacher's success, the farmers ranked them as follows, with the one contributing most listed first: Classroom

Instruction, On-farm Instruction and Supervision and Community Service. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

Table 24 gives the teachers' ranking of three of the agricultural teacher's activities, according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations included).

TABLE 24

NINETY-NINE NORTH CAROLINA AGRICULTURAL TEACHERS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH ONE CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	Activity	t Values and Levels of Significance OF	CS
1.7373	.7862	CI	1.907	5.123
			NS	**
1.9494	.7705	OF		3.271
				**
2.3131	.7869	CS		

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

The teachers assigned a definite third place to Community Service, giving this activity a mean rank which has a difference, when compared to the mean rank of either of the other two activities, that is significant at the 1 per cent level. The difference in the mean ranks of Classroom Instruction and On-farm Instruction and Supervision is not significant at the 5 per cent level. While appearing to be not too certain concerning which activity contributed most to the agricultural teacher's success, the teachers do not seem to be in doubt concerning the activity which afforded the least contribution to the success of the agricultural teacher.

Table 25 gives the county school superintendents' ranking of three of the agricultural teacher's activities, according to their contribution to the agricultural teacher's success ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 25

SEVENTY-SEVEN NORTH CAROLINA COUNTY SCHOOL SUPERINTENDENTS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH ONE CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	Activity	t Values and Levels of Significance	
			OF	CS
1.1818	.5026	CI	11.198	18.862
			**	**
2.0519	.4530	OF		8.906
				**
2.7662	.5321	CS		

**Significant at the 1 per cent level

The superintendents ranked the activities as follows according to their contribution to the teacher's success, with the one contributing most listed first: Classroom Instruction, On-farm Instruction and

Supervision and Community Service. In all three cases the differences in the mean ranks are significant at the 1 per cent level.

Table 26 gives the ranking of three of the agricultural teacher's activities, according to their contribution to the agricultural teacher's success by the state supervisors of and heads of agricultural education departments ("t" values, levels of significance of the differences in mean ranks, and standard deviations are included).

TABLE 26

NINETY-FIVE UNITED STATES (AND TERRITORIES) AGRICULTURAL EDUCATION STATE SUPERVISORS' AND AGRICULTURAL EDUCATION DEPARTMENT HEADS' RANKING OF AGRICULTURAL TEACHER'S ACTIVITIES ACCORDING TO THEIR CONTRIBUTION TO THE AGRICULTURAL TEACHER'S SUCCESS, WITH ONE CONTRIBUTING MOST RANKED LOWEST

Mean Rank	Standard Deviation	Activity	t Values and Levels of Significance	
			OF	CS
1.6736	.6721	CI	1.083 NS	12.578 **
1.5684	.6594	OF		13.960 **
2.7578	.4971			

**Significant at the 1 per cent level
NS Not significant at the 5 per cent level

The agricultural education specialists in the study gave a definite third place to Community Service with differences between the mean ranks for Community Service and the mean ranks for the other two activities being significant at the 1 per cent level. On-farm Instruction and Supervision has a mean rank slightly lower than does Classroom

Instruction; the difference in these two mean ranks, however, is not significant at the 5 per cent level.

The state supervisors of and heads of agricultural education were the only population group to rank On-farm Instruction and Supervision over Classroom Instruction according to contribution to the teacher's success. It is possible that experience with the Veteran Farmer Training Program and its emphasis on On-farm Instruction and Supervision influenced the ranking of that activity.

Amount of Time Recommended for Each Class and Activity

In Table 27 estimates are given, by each population group, for the percentage of time that the agricultural teacher should spend with each of the three classes: high school, young farmer and adult farmer. It should be borne in mind that the farmers, teachers and county superintendents are all from North Carolina, while the state supervisors and heads of agricultural education departments were located throughout the United States and Territories.

TABLE 27

PER CENT OF AGRICULTURAL TEACHER'S TIME THAT SHOULD BE SPENT WITH EACH CLASS

Class	Per Cent Listed by Population Groups F	T	S	S-H	Average
High School	55.7	63.7	67.2	57.3	61.0
Young Farmer	27.7	19.9	20.1	22.8	22.6
Adult Farmer	16.6	16.4	12.7	19.9	16.4

From Table 27 it appears that the farmers and supervisors and heads think much alike on the percentage of the teacher's time deserved by the high school classes, while the teachers and superintendents are within 4 per cent of each other in their estimates on this matter. The teachers, superintendents, and supervisors and heads were within 3 per cent of each other on the percentage of time deserved by the young farmers, while the farmers and teachers agreed that about 16 per cent of the teacher's time should go to adult farmers. When an average of the answers of the four groups is obtained, it is found that 61.0 per cent of the agricultural teachers' time should go to the high school class and 39.0 per cent of his time should go to young farmer and adult farmer classes combined.

Table 28 gives the per cents of responses listed by the four groups in the study to the question, "Which, if any, of the classes needs more of your agricultural teacher's time?"

TABLE 28

PER CENTS OF RESPONSES FOR CLASS NEEDING MORE OF THE AGRICULTURAL TEACHER'S TIME

Class	*Per Cents of Responses for Each Class F	T	S	S-H	Average
High School	43.2	7.2	55.3	21.0	31.7
Young Farmer	25.8	74.2	19.7	72.6	50.6
Adult Farmer	6.8	52.6	1.4	53.7	28.6
None	28.8	17.5	22.4	5.3	18.5

*Some made more than one choice; hence the total adds to more than 100 per cent.

The per cent of responses for more of the agricultural teacher's time being spent with the high school class ranged from 7.2 from the teachers to 55.3 from the superintendents. For more time with young farmer classes the per cent of responses ranged from 19.7 from the superintendents to 74.2 from the teachers. For more time with adult farmer classes, the per cent responses ranged from 1.4 from the superintendents to 53.7 from the agricultural education state supervisors and department heads. For "none," or no class needing more time, the per cent of responses ranged from 5.3 (state supervisors and heads) to 28.8 (farmers). For the average answer of the four groups, the per cent of responses for classes needing more time ran from 18.5 (for "none") to 50.6 (for young farmer).

In Table 29 estimates are given by each population group for the percentage of time that the agricultural teacher should spend on the three activities under consideration in the present study: classroom instruction, on-farm instruction and supervision, and community service. The reader should keep in mind that all population groups except the state supervisors and heads of agricultural education (who are from the United States and the Territories) are from North Carolina.

The farmers' estimate is about 10 per cent lower than the average of the other three groups in the percentage of the agricultural teacher's time that should be spent in classroom instruction. The estimates of the percentage of time that should be spent in on-farm instruction and supervision ranges from 25.4 (superintendents) to 35.6 (state supervisors and heads of agricultural education). The estimate

TABLE 29

PER CENT OF AGRICULTURAL TEACHER'S TIME THAT SHOULD BE SPENT IN EACH ACTIVITY

Activity	Per Cent Listed by Each Group				
	F	T	S	S-H	Average
Classroom Instr.	45.9	54.0	59.4	53.2	53.1
On-farm Instr. & Supervision	33.8	30.1	25.4	35.6	31.2
Community Service	20.3	15.9	15.2	11.2	15.7

of the percentage of time that should be spent in community service ranges from 11.2 (state supervisors and heads of agricultural education) to 20.3 (farmers). From the average of the estimates from the four groups it might be concluded that classroom instruction deserves as much of the teacher's time as the other two activities combined, while on-farm instruction and supervision deserves twice as much of his time as community service.

Table 30 gives the per cents of responses listed by the four groups in the study to the question, "Which, if any, of the activities need more of your agricultural teacher's time?"

The per cent of responses for more time being spent in classroom instruction ranged from 8.2 (teachers) to 38.5 (superintendents). The per cent of responses for more time being spent in on-farm instruction and supervision ranged from 32.0 (superintendents) to 75.7 (state supervisors and heads). The per cent of responses for more time being spent in community service was estimated 3.7 (farmers), 4.2 (state

TABLE 30

PER CENTS OF RESPONSES FOR ACTIVITY NEEDING MORE OF THE AGRICULTURAL TEACHER'S TIME

Activity	*Per Cent of Responses for Each Activity F	T	S	S-H	Average
Classroom Instr.	23.6	8.2	38.5	15.7	21.5
On-farm Instr. & Supervision	46.9	68.0	32.0	75.7	55.7
Community Service	3.7	30.9	6.6	4.2	11.4
None	26.5	24.7	26.6	6.3	21.0

*Some made more than one choice; hence the total adds to more than 100 per cent.

supervisors and heads), 6.6 (superintendents) and 30.9 (teachers). The state supervisors and heads listed "none" (no activity) as needing more time in 6.3 per cent of their responses, while the other groups each listed "none" in about 25 per cent of the responses.

Comments Offered by Individuals in the Study

Voluntary remarks were not requested in the questionnaires. The following are comments that were offered by the farmers:

> We, that are here-in defined as adult farmers, are often times hard to be taught new and better methods of farming. The young will learn.
>
> (The agriculture teacher needs) more time for preparation and organizing teaching aids.
>
> There is almost no on-the-farm instruction by our agriculture teacher - in all my (son reporting) four years of agriculture, he didn't see any project of mine . . . . the classroom questions were prepared about 10-12 years before and they weren't distributed according to the students' projects (some

enterprises that we studied aren't even practiced or farmed here).

Most teachers have too much classroom work assigned them. . . . the classrooms are all right for some things, but not too much for farmers . . . .

All three (high school, young farmer, adult farmer) need more attention than they are now getting.

The agricultural teachers made no special comments.

Comments offered by the superintendents were as follows:

This (the questionnaire) is a poor instrument. A good agricultural teacher must be first an important cog in the school as a whole. As a teacher remains at a school over the years, his time schedule will change as it does from month to month.

The superintendent and the principal value the agricultural teacher on the basis of classroom teaching but the community judges him on basis of work done with adults. The community seems to value a teacher on the basis of the time he spends with adults - and not what he does in school. The teacher is more responsible to outside demands than to the school in many instances. They all do too much shop work - "busy work for boys."

This is an incomplete report as you only list five activities which is only a part of the work a vocational agriculture teacher is now doing. Community service could occupy 80 per cent of the time, shop preparation is another big item, etc.

Adult and young farmers' groups will require more time than the agriculture teacher can afford if he is to do a real job of teaching high school boys. And the results, in my opinion, would be doubtful. Extension classes, such as may be desired under the present plan, are very difficult to get. Better results in the long run will be secured by working with high school boys and train them to want evening classes. When this is done, the time required for organization will be greatly reduced. The emphasis, it seems to me, should be with the high school boys. Every boy should have a project.

The agricultural teachers' function is to teach, not to render community service.

Vocational agriculture provides valuable training also for many boys who will not farm, such as shop training. In addition, who knows exactly which boys will farm?

We have had agriculture 4 or 5 years. Even so, neither I nor the principal feel that we can evaluate it properly.

In answering your questionnaire, there are many factors that would qualify the answers. In my judgement, the quantity of the work is of tremendous importance. The set-up in this state does not always provide either quantity or quality. The quality of the work comes second in importance to the quantity, as we now stand. (In other words, we know how to be better than we do.) There are vocational teachers who work 12 months - $5\frac{1}{2}$ days per week. All are paid for this amount of work. There are many who work less than five days per week, and less than 12, 11, or even 10 months, I am told. The supervision comes from Raleigh - also much of the actual employment, tenure, etc., as it works out! Such a situation is unsound. Principals and superintendents should be taught how to get work done - what to expect - what to get the public to expect - etc. If the remainder of the school personnel were on the basis of some vocational teachers - I'd say we'd be anywhere from 25 to 50 per cent less efficient.

In the average school there's plenty of time for everything - including young farmers and old ones - if the program is set up properly - and teachers are capable and energetic, I believe. They would have to devote their time to teaching - rather than working an undue amount of time for prominent farmers and school commitments, etc.

It is quite evident to me that you have the same philosophy with reference to vocational agriculture as the Division of Vocational Education of the State Department of Education has, namely, that the vocational agriculture work is not a part of the total school program but that it is something that uses the school as a base of operation for a program superimposed upon the school program. Why should vocational agriculture have adult education programs when no other portion of the high school program has it?

Comments from the state supervisors and heads of agricultural education departments were:

Success is often confused with reputation.

Keep community service as low as possible.

If classroom instruction is not good, the on-farm instruction will be accordingly weak.

Depends on situation (answer for entire questionnaire).

I don't recognize community service as a part of his job.

Try to keep community service to a minimum.

Too much time is devoted to instruction for which there is no need.

If and when the out-of-school program in its total concept becomes a reality, and a recognized responsibility of the administration, then I'd rate this (Program A) No. 1.

I cannot, in all cases, tell the difference between "young farmer" and "adult farmer" classes.

We have a slowly increasing number of instructors giving full-time to young farmer and adult classes.

In this state there are several reasons why adult education is not necessarily a major function of vocational agriculture . . .

First responsibility (of the agricultural teacher is) to the all-day group.

Service may make him popular but not a successful teacher.

. . . classroom or on-farm instruction can hardly function well alone.

My viewpoint and the public's viewpoint of a teacher's success are different.

We are adding the second teacher in many departments who will devote half of his time to the high school department and half of his time to the young farmers group.

Summary

The four groups in this study ranked the four program alternatives in order of value as follows, with the most valuable first: Program C (more agricultural teachers), Program D (greater selectivity of high school students), Program B (present program) and Program A (two years of high school instruction). It is worthy of noting perhaps that the present program, when viewed by the four hundred individuals in this study, is regarded as third best. The county superintendents of schools regarded the present program, Program B, as best and assigned that program a mean rank that is significantly different at the 1 per cent level from the mean ranks of the other three programs. It should be borne in mind that an individual who is responsible for a total educational program would perhaps view a special area of that program differently from someone who is primarily interested in just such an area of the overall program.

Perhaps the low ranking of Program A, on the part of the four groups combined, can be attributed to the fact that the proposal is somewhat of an innovation in vocational agriculture. More than any of the other three program alternatives, Program A would call for a reinterpretation of, if not a change of, federal legislation and United States Office of Education policy dealing with vocational education in agriculture.

Generally speaking the vocational agricultural classes were regarded as being of value in the following order, with the most valuable listed first: High School, Young Farmer and Adult Farmer. The teachers, with a difference in mean ranks not significant at the 5 per cent level, reversed the mean rank of High School and Young Farmer. In order of value, with the most valuable listed first, the activities of the vocational agricultural teacher were generally listed: Classroom Instruction, On-farm Instruction and Supervision, and Community Service, with a much stronger third place given to Community Service than was the first place assigned to Classroom Instruction. The farmers, with a difference in mean ranks not significant at the 5 per cent level, reversed the mean ranks of Classroom Instruction and On-farm Instruction and Supervision.

The classes were ranked as follows according to their contribution to the agricultural teacher's success, the one contributing most listed first: High School, Young Farmer and Adult Farmer. There was no exception on the part of the four groups in the study to this ranking. Only in the agricultural education state supervisors' and department heads' mean rank of the Young Farmer and the Adult Farmer classes were the differences in mean ranks not significant at the 1 per cent level. In this particular case, however, the difference in the mean rank assigned Young Farmer and in that assigned Adult Farmer was not significant at the 5 per cent level.

The activities were generally ranked as follows according to their contribution to the agricultural teacher's success, the one contributing most listed first: Classroom Instruction, On-farm Instruction and Supervision and Community Service. The agricultural education state supervisors and department heads reversed Classroom Instruction and On-farm Instruction and Supervision. The difference in the mean ranks assigned these two activities was not significant at the 5 per cent level. It would appear that the four groups were much more in agreement on the relative contribution of the classes, than on the relative contribution of the activities, to the agricultural teacher's success.

The four groups in the study recommended that the agricultural teacher spend 61.0 per cent of his time with the High School classes, 22.6 per cent of his time with the Young Farmer classes and 16.4 per cent of his time with the Adult Farmer classes. About half (50.6 per cent) of the responses of the four groups indicates that the Young Farmer classes need more of the agricultural teacher's time than they are now receiving.

The four groups combined recommended that 53.1 per cent of the teacher's time be spent in Classroom Instruction, 31.2 per cent in On-farm Instruction and Supervision, and 15.7 per cent in Community Service. The combined opinion (55.7 per cent of the responses) of the four groups indicates that On-farm Instruction and Supervision needs more of the teacher's time than it is now receiving.

The fact that the preponderance of the enrollment in vocational agriculture has been in the High School classes (with a concurrent dearth of Young Farmer and Adult Farmer students) may have influenced some of the answers given by the various population groups. Another factor which should not be overlooked is the influence of the widely-acclaimed Veteran Farmer Training Program and its emphasis on the on-farm training. Both of these aspects of the program in teaching agriculture are discussed and documented in Chapter II.

CHAPTER IV

ADDITIONAL DATA CONCERNING THE AGRICULTURAL TEACHER'S TIME

In addition to the nine questions which were asked members of all four population groups in this study, the one hundred agricultural teachers were asked other questions. A summary of the answers, reported as arithmetic means, is given in Chapter IV.

The average teaching experience of teachers in this study is 13.17 years, with an average of 8.53 years having been spent in their present departments.

The average enrollment of all-day pupils per teacher was 48.48, while it was 12.30 and 12.56 in the young farmer and adult farmer classes respectively. Each teacher had more than one section of all-day pupils.

The vacations of teachers for 1951-52 were spent as listed in Table 31.

Only 31 per cent of the teachers used their allotted two weeks of vacation time for recreational purposes while 46 per cent of the teachers took no vacation at all. Twenty per cent of the teachers took vacations in the form of attending summer school.

Plans for vacations for the year 1952-53 are listed in Table 32.

Slightly more than half, 52 per cent, of the teachers plan some form of recreation as their vacation time for the 1952-53 school year.

The average work week of the teachers in this study was

TABLE 31

WAYS IN WHICH AGRICULTURAL TEACHERS USED THEIR VACATION TIME, 1951-52

No. of Teachers	How Vacation Time Used
20	Educational (Summer School)
31	Recreational
3	Work for Pay (Outside Dept.)
46	No Vacation Taken

TABLE 32

PLANS OF AGRICULTURAL TEACHERS FOR 1952-53 VACATION TIME

No. of Teachers	Plans for Vacation Time
20	Educational (Summer School)
52	Recreational
2	Work for Pay (Outside Dept.)
26	No Vacation Planned

estimated to be 59.26 hours. Table 33 gives a breakdown of these estimates.

Fifty-two per cent of the teachers estimated that they worked 60 or more hours per week, while 17 per cent of the teachers estimated

70 or more hours as their work week. Ten per cent of the teachers estimated a work week of less than 50 hours.

TABLE 33

ESTIMATED WORK WEEK IN HOURS

No. of Teachers	Length of Work Week
10	40-49
38	50-59
35	60-69
8	70-79
4	80-89
5	90-100

Non-agricultural duties performed in 1951-52 were estimated as follows in Table 34 by the one hundred teachers in this study.

From Table 34 it is found that the average teacher estimated 11.27 hours as the time spent per week in non-agricultural duties. These duties were regarded as "helping more than hindering" the over-all vocational agricultural program more than two and one-half times as often as they were regarded as "hindering more than helping" the program. Nearly twice as many "equally helped and hindered" ratings were listed as were "hindered more than helped." Stated differently, 292 ratings were made of the effects of the non-agricultural duties on the over-all vocational agricultural program. Of these 292 ratings, 47.5 per cent were "helped more than hindered"; 33.8 per cent were "equally

TABLE 34

NON-AGRICULTURAL DUTIES PERFORMED BY AGRICULTURAL TEACHERS, 1951-52

Duty	Total Hrs. per Tchr. Weekly	No. Reporting Effect of Duty on Over-all Program: Helped more than Hindered	Hindered more than Helped	Equally Helped & Hindered
Home room	.31	7	7	4
Teaching another subject	.12	3	-	-
Coaching athletics	.59	5	2	4
Taking ball game tickets	.24	7	3	6
Study hall supervision	.47	1	7	1
School bus supervision	.35	2	6	6
School repair jobs*	2.06	24	23	26
Community service*	4.74	40	6	30
Civic meetings & duties	2.38	49	1	22
Total	11.27	138	55	99

*Non-educational

helped and hindered" and 18.7 per cent were "hindered more than helped."

The percentage of the school day (during school hours) allotted for community service was listed as 17.0 per cent. The percentage of the school day (during school hours) needed for community service was listed as 28.0. The teachers apparently felt that they needed over 50 per cent more time (during the school day) than they were allotted for community service.

The least amount of time estimated to have been spent per week in community service activities (pruning, culling, de-horning, canning, etc.) was 11.5 hours. Of this time 51.3 per cent was spent in truly educational service. The most amount of time estimated to have been spent per week in community service was 23.8 hours, 50.9 per cent of which was spent in truly educational service. An average of 17.7 hours per week was estimated spent in community service, 51.1 per cent of which was spent in truly educational service.

The coordination between classroom instruction and community service activities as rated by the teachers is summarized in Table 35.

TABLE 35

COORDINATION BETWEEN CLASSROOM INSTRUCTION
AND COMMUNITY SERVICE ACTIVITIES

No. of Teachers	Rating of Coordination
8	Excellent
46	Good
41	Fair
1	Poor
4	Not Rated

Ninety-five per cent of the teachers considered the coordination between classroom instruction and community service activities as "fair" or better. This applies, however, to the part of community service work that is educational in character.

Monthly professional meetings consumed a considerable amount of time of the teachers as is shown in Table 36.

TABLE 36

HOURS SPENT PER MONTH IN PROFESSIONAL MEETINGS

Hours	Type of Meeting
5.93	Agricultural & agricultural education
4.09	General school
4.20	Civic
14.22	Total

A summary of the answers to a question concerning the amount of time deserved as compared to the amount of time received by each class in 1951-52 is given in Table 37.

TABLE 37

TIME DESERVED AND RECEIVED BY EACH CLASS

Class	% Time Deserved	% Time Received
All-day	62.9	73.5
Young Farmer	20.2	12.8
Adult Farmer	16.8	13.6

The teachers apparently felt that they spent more time with the high school boys than that group deserved. They indicated that the 10.6 per cent of their time spent with, but undeserved by, the high school boys was so consumed as to be to the detriment of the young farmer and adult farmer classes, especially the former.

Supervised farming visits needed annually and made in 1951-52 are compared in Table 38.

TABLE 38

ANNUAL SUPERVISORY VISITS NEEDED AND MADE, 1951-52
(BY CLASS MEMBER)

Class	Number of Visits Needed Annually	Number of Visits Made '51-52	Supervisory Time (Hours) Needed Annually	Supervisory Time (Hours) Spent '51-52
All-day	7.90	4.99	12.64	7.16
Young Farmer	6.39	4.08	10.73	5.04
Adult Farmer	4.75	2.76	8.29	4.68

From the above information it is seen that the teachers felt that their supervisory visits, both in number and total time spent, were inadequate, in some cases grossly inadequate.

Supervisory visits with the all-day class were classified according to type as shown in Table 39.

TABLE 39

TYPES OF ALL-DAY SUPERVISORY VISITS

Per Cent	Type
21.1	Inspectional
46.2	Instructional
16.4	Functional
16.2	Social

Sixty-seven and three-tenths per cent of the visits were regarded as "instructional" or "inspectional."

Supervisory visits with the all-day class were rated by the teachers as shown in Table 40.

TABLE 40

RATING OF ALL-DAY SUPERVISORY VISITS

Per Cent	Rating
19.8	Excellent
45.0	Good
22.9	Fair
12.3	Poor

Sixty-four and eight-tenths per cent of the ratings of the all-day supervisory visits were given a rating of "good" or better.

Summary

The teachers, as a group, work long hours and take little vacation for recreational purposes.

Eleven and three-tenths hours per week may be a large amount of time for teachers to spend in non-agricultural duties. If this amount of time were deducted from the average work week, the teacher would still be working about forty-eight hours per week. It should be noted, however, that the majority of the teachers regard non-agricultural duties as "helping more than hindering" or as "equally helping and hindering" their over-all program.

Over seventeen hours per week were estimated as spent in community service activities, about half of which were spent in educational service. The teachers feel that they need a larger proportion of the school day than they are now allotted for community service activities.

Coordination between classroom instruction and community service activities is generally "good."

The teachers appear to feel that more emphasis is needed on adult work and less on high school work. They also feel that classroom instruction and community service activities, when compared to on-farm instruction and supervision, need de-emphasizing.

There is a feeling that supervisory visits are inadequate both in number and in total hours per year.

The all-day visits are considered, generally, to be "fair" or better and to be for a purpose other than "social."

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The material in this chapter is based on the data secured in the study and from related literature. The following points are a summary of the results of the study and of pertinent literature reviewed:

1. Teachers of vocational agriculture throughout the nation work long hours and, in some cases, they have been found performing non-educational and non-agricultural duties.
2. Although adult education in agriculture is listed in legislation and in federal and state policies as an integral part of the work of the teacher of vocational agriculture, a very small proportion of the teacher's time is devoted to adults. In fact, widespread neglect of adults in agriculture is apparent.
3. The duties and responsibilities of the teacher of vocational agriculture have greatly increased since the passage of the Smith-Hughes Act in 1917.
4. An increasingly larger proportion of boys who take vocational agriculture in high school do not enter farming as a vocation.
5. A large percentage of men who are now farming did not take vocational agriculture in high school.
6. There is a keen interest on the national, state and local levels in determining the proper balance between all-day and adult work for

the teacher of agriculture. Also, much has been written on the relative importance of his various activities.

7. Accompanying universal endorsement of the need for analysis of the increasing load of teachers of vocational agriculture and for a balance between all-day and adult work there is very little research actually pertaining to these problems.
8. According to some studies, school personnel have been poorly prepared for working with adults.
9. When the mean ranks assigned the program alternatives by the four population groups are considered, the programs are of value, as follows, with the most valuable first: Program C (more agricultural teachers), Program D (greater selectivity of high school students), Program B (present program) and Program A (two years of high school instruction).
10. Generally speaking, the classes were ranked as follows according to their value, with the most valuable listed first: high school, young farmer and adult farmer. However, with a difference in mean ranks which was not significant at the 5 per cent level, the teachers gave the young farmer class first place over the high school class.
11. In general, the activities were ranked as follows according to their value, with most valuable first: classroom instruction, on-farm instruction and supervision, and community service. The farmers, with a difference in mean ranks not significant at the 5 per cent level, gave on-farm instruction and supervision first place over community service.

12. With no exception, the classes were ranked as follows according to their contribution to the agricultural teacher's success, one contributing most listed first: high school, young farmer and adult farmer.

13. The activities were generally ranked as follows according to their contribution to the agricultural teacher's success, one contributing most listed first: classroom instruction, on-farm instruction and supervision, and community service. The heads and state supervisors of agricultural education ranked (with differences in means not significant at the 5 per cent level) on-farm instruction and supervision over classroom instruction.

14. The four groups in the study recommended that the agricultural teacher spend 61.0 per cent of his time with the high school classes, 22.6 per cent of his time with the young farmer classes and 16.4 per cent of his time with the adult farmer classes. The consensus (50.6 per cent of the responses) of the four groups indicates that the young farmer class needs more of the agricultural teacher's time than it is now receiving. The teachers and superintendents thought that an average of about 65 per cent of the teacher's time should go into work with all-day boys, while the farmers and the state agricultural education personnel consider that all-day boys deserve only about 55 per cent of the teacher's time.

15. The four groups combined recommended that 53.1 per cent of the teacher's time be spent in classroom instruction, 31.2 per cent in on-farm instruction and supervision, and 15.7 per cent in community

service. The combined opinion (55.7 per cent of the responses) of the four groups indicates that on-farm instruction and supervision needs more of the teacher's time than it is now receiving. The superintendents, however, conceive of classroom instruction as first among activities needing more of the teacher's time.

16. The North Carolina teachers of vocational agriculture in this study work long hours and, generally, devote little time to vacations.
17. Although working an average of 59.26 hours per week the teachers regard the 11.30 hours of this total which were spent on non-agricultural duties as generally "helping more than hindering" their over-all program.
18. While spending 17 hours weekly on the average in community service, the teachers need a larger proportion of the school day for this activity. Coordination between classroom instruction and community service is "good."
19. The teachers are making inadequate supervisory visits to all of their classes. Those visits to the high school boys are "fair" or better, and are usually for a purpose other than a "social" one.

Conclusions

As a result of the summary just given, the following conclusions are drawn:

1. A study of the emphases needed in vocational agriculture is pertinent since teacher overload, neglect of adults and legal obligations, and poor preparation of school personnel for work with

adults are very evident. Suggested changes found in agricultural education literature further substantiate the need for a determination of the emphases needed in vocational agriculture.

2. Generally speaking, the superintendents tend to disagree with the other three groups concerning the emphases needed in vocational agriculture. The superintendents regard high school classes and classroom instruction of prime importance. The other groups, in the main, think that young and adult farmer classes and on-farm instruction and supervision deserve more emphasis than they are now receiving.
3. The present North Carolina program of vocational agriculture, in the eyes of all groups studied except the superintendents, is not the best one.
4. There is general agreement on the value of the classes and the value of the activities of the agricultural teacher to the community. Also there is general agreement on the contribution of the classes and the contribution of the activities to the success of the agricultural teacher.
5. Non-agricultural duties, professional meetings and local policy are delaying much-needed work of teachers with young and adult farmers.

Recommendations

In view of the information gained from this study and from related literature, the author submits the following recommendations:

1. Where enrollment conditions warrant, multiple teacher departments are recommended.

2. A careful screening of prospective high school vocational agricultural students is urged.
3. A better program of public relations for, and general understanding of, vocational agriculture, especially its legal requirements, should be attempted at all levels. One example of this is allotting time in teacher education institutions for agricultural education personnel to meet with classes in administration and supervision. School administration and supervision classes should include the legal and state requirements for a program in vocational agriculture.
4. Better preparation should be given all school personnel for working with adults.
5. For high school, young farmer, and adult farmer classes it is recommended that the time spent by the teacher in supervisory visits, whether on an individual or group basis, be counted as class instruction in determining his teaching load.
6. At least 39 per cent of the agricultural teacher's time should be devoted to young farmers and adult farmers.
7. It is recommended that the agricultural teacher re-examine his schedule, giving close attention to the time spent in non-educational community service jobs and in non-agricultural school duties.
8. At least 31 per cent of the agricultural teacher's time should be spent in on-farm instruction and supervision.
9. A reduction is recommended for the time spent by the agricultural teacher in: his total work week, meetings, non-agricultural duties and community service work, high school work, and classroom

instruction. A work week of 40 hours, exclusive of time for preparation for teaching, is recommended. Such a work week would tend to give the agricultural teacher work hours more comparable to those of other teachers.

10. Emphases are recommended for young farmer and adult farmer classes, for on-farm instruction and supervision, and for the thoughtful planning and organizing of a balanced, efficient program of vocational agriculture.
11. It is recommended that a local advisory council and the proper supervisory personnel determine teacher load and the emphases needed in each program of vocational agriculture. Such councils are in operation in North Carolina.[1]

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[1] F. H. Spain, Jr., "Use of Advisory Councils by Teachers of Vocational Agriculture in North Carolina With Suggestions for Improvement." (Unpublished Master's thesis, Department of Agricultural Education, North Carolina State College, 1949).

APPENDIX

Original Letter to Farmers*

July 19, 1952

Dear Sir:

Your high school agriculture department and your agriculture teacher have probably helped you in the past. You now have a chance to help them and possibly the entire vocational agriculture program in the state.

After taking agriculture in high school and later teaching it, I am 100% sold on it. As with everything else that grows, however, there are some things that we can do to make it grow better.

Since you had a senior boy in high school and since you help pay for agriculture in your school, you can give me very sound information on where and how you think the agriculture teacher can best spend his time.

Please take just a few minutes and fill out the back side of this sheet, keeping the following definitions in mind:

1. Young farmers - young men out of school, usually 16 to 25 years old, who are living on farms but are not yet established in farming.
2. Adult farmers - men 26 years and older who are already established in farming.

You might like to discuss this with your son. Please fill it out and mail it today in the enclosed envelope. Please be frank. Do not put your name on the form.

Thank you very much for your help.

Sincerely,

Frank Spain

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*Re-sent on August 1, 1952 and August 15, 1952.

Follow-up Letter to Farmers

August 30, 1952

Dear Sir:

One of the purposes of the School of Education at North Carolina State College is to help improve the present program of vocational agriculture as well as to train men for future teachers of vocational agriculture. You can see, then, that the School of Education tries to give you more for that part of your money that goes to support vocational agriculture in your high school.

As Dean of the School of Education which includes the Department of Agricultural Education, I am interested in a study being made by Mr. Frank Spain, Assistant Director of Admissions in our Registration Office. Mr. Spain is attempting to find out just where and how your agriculture teacher can best spend his time. He feels that the county superintendents, the agriculture teachers, and the fathers of young men who have taken vocational agriculture in high school are the ones who can furnish him this information. The agriculture teachers and county superintendents have already been surveyed.

Since it is impossible to survey all the fathers of the more than 25,000 boys who take vocational agriculture in North Carolina each year, Mr. Spain has selected a small group of fathers who are representative of the entire group in the state. Won't you co-operate in this study by serving as "secretary" for your father (mother or guardian if father deceased or away) in getting the enclosed questionnaire completed and returned to Mr. Spain.

The following definitions should be kept in mind:

1. Young farmers - young men out of school, usually 16 to 25 years old, who are living on farms but are not yet established in farming.

2. Adult farmers - men 26 years and older who are already established in farming.

It will take about 10 minutes to do this job. The results in an improved program of vocational agriculture should be worth far more than that! A return envelope is enclosed. Please reply by September 5, 1952. No names are wanted.

THANK YOU VERY MUCH.

Sincerely,
J. Bryant Kirkland
Dean, School of Education
(North Carolina State College)

Original Letter to County Superintendents of Schools

July 7, 1952

Dear Sir:

It is hoped that you will understand that my desire for anonymity on your part accounts for the impersonal nature of this letter.

Having been a student and teacher of vocational agriculture in North Carolina, I am very interested in your contribution to a survey that is being made to determine the time distribution for a teacher of agriculture in our state.

The following definitions should be kept in mind:

1. Young farmers - young men out of school, usually 16 to 25 years of age, who are living on farms but are not yet established in the business of farming.
2. Adult farmers - men 25 years and older who are already established in farming.
3. Your teacher of agriculture - the average teacher of agriculture in your county.

As you know, the federal law which financially supports vocational agriculture states that the purpose of this program is "to train present and prospective farmers for proficiency in farming." There has been much discussion, and some disagreement lately, concerning the time distribution of the teacher of agriculture.

Please rank the questions on the reverse side and return the sheet immediately. DO NOT PUT YOUR NAME ON THIS FORM. PLEASE BE FRANK.

Sincerely,

Frank Spain

Follow-up Post Card to County Superintendents of Schools

July 21, 1952

QUESTION: What is the most desirable future vocational agriculture program for North Carolina?

ANSWER: (Available when you complete and return my survey form.)

Thank you very much.

Frank Spain

Follow-up Letter to County Superintendents of Schools

August 5, 1952

Dear Sir:

I hope that your convention next week will be profitable and enjoyable.

Thinking that my first survey form sent you was lost and KNOWING that you have an important contribution to make to my study, I am enclosing a second copy of the rating sheet. Your completing and returning it will be worth far more to vocational agriculture in North Carolina than the ten minutes required.

Results of this statewide study including you, agriculture teachers and parents will be available if requested.

PLEASE answer by August 9, 1952.

Sincerely,

Frank Spain

Encl.

Follow-up Letter to County Superintendents of Schools

September 1, 1952

Dear Sir,

As Assistant Director of Admissions at North Carolina State College my sincere, best wishes for every success go with you as you begin the 1952-53 school year. If I can do anything to help make yours a successful year, it would make me very happy to hear from you.

You can do much to make September a successful month for me - just join the more than 68% of the County Superintendents who have completed and returned my schedule (enclosed with envelope).

If we can be of help, please call on us.

Very best wishes,

Frank Spain

(4th Request)

Original Letter to State Supervisors and Teacher Trainers

March 2, 1953

Dear Sir:

Mr. F. H. Spain, Jr., Assistant Director of Admissions at North Carolina State College, Raleigh, is majoring with me for the degree of Doctor of Education. His doctor's thesis is trying to determine the proper use of an agricultural teacher's time. We are asking each state supervisor and the head of the department of agricultural education at the institutions where agricultural teachers receive their professional preparation to assist in determining the emphasis needed in future programs of vocational agriculture.

He is also using the state of North Carolina to secure the reactions from the agricultural teachers, the county superintendents of public instruction and from representative farmers.

I shall certainly appreciate it if you will take the necessary time to help in this study. Please complete the questionnaire and return it to Mr. Spain at your earliest convenience.

Sincerely,

E. W. Garris
Head, Department of
Agricultural Education
(University of Florida)

Follow-up Letter to State Supervisors and Teacher Trainers

April 11, 1953

Dear :

On March 2 a schedule similar to the one on the reverse side was sent to each State Supervisor of Agricultural Education and to each Head of Agricultural Education in teacher education institutions in the United States, Hawaii, and Puerto Rico. Of the 104 forms mailed 88, or 84.6%, have been returned. You will agree that these returns were excellent - a tribute to two things, perhaps: (1) the letter of explanation written by Dr. E. W. Garris, Head, Agricultural Education, University of Florida, (2) the simplicity and ease of completion of the form.

As Dr. Garris mentioned in his letter, this survey is one phase of data collection for a dissertation, the purpose of which is to determine emphases needed in vocational agriculture. Other population groups, all from North Carolina, include selected farmers, vocational agriculture teachers, and county superintendents of schools.

This is my first and only follow-up request. Your completion and return of the form will be very sincerely appreciated. An envelope is enclosed.

Sincerely,

F. H. Spain, Jr.

Encls.

Sample Survey Form for the Four Population Groups in the Study[*]

A SURVEY OF OPINIONS ON VOCATIONAL AGRICULTURAL PROGRAMS

1. Listed below are four possibilities of future programs for agricultural teachers. Please rank these programs according to their value in your State (County, Community.) Put the figure "1" in front of the best one, "2" in front of the second best, "3" in front of the third best, and "4" in front of the fourth best. If you think of a type of program that is not listed, please list and rank it.

RANK FUTURE PROGRAMS FOR AGRICULTURAL TEACHERS

____ Give high school instruction for 2 years using the time so saved for young and adult farmers.

____ Give high school instruction for 4 years and give any time left to young and adult farmers.

____ Increase the number of teachers to provide needed instruction for all types of classes—high school, young and adult farmers.

____ Allow only those boys who appear very likely to farm to take agriculture in high school, and eliminate them at the end of their first year if they have not started acceptable supervised farming programs. This should give the agricultural teacher more time for work with the young and adult farmers.

____ IF ANY OTHER—EXPLAIN AND RANK

2. What percentage (figuring the total of the 3 as 100%) of his time should the agricultural teacher give to the following classes?
____ High School ____ Young Farmer ____ Adult Farmer

3. As the classes above are now taught in your State (County, Community,) which, if any, needs more of the agricultural teacher's time?

4. What percentage (figuring the total of the 3 as 100%) of his time should the agricultural teacher give to the 3 following activities? (1) ____ Classroom instruction (2) ____ On-farm instruction and supervision (3) ____ Community service.

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[*] Additional questions were asked the agricultural teachers. Questions 2, 3, 4 and 5 above were asked the agricultural teachers in a slightly different manner.

5. As the three activities above are now conducted in your State (County, Community,) which, if any, needs more of the agricultural teacher's time?

6. Please rank the following classes according to their contribution to the success of the agricultural teacher. Rank the one adding most to his success as 1, next 2, etc. ___ Young farmer ___ High School ___ Adult farmer

7. Please rank the following 3 activities according to their contribution to the success of the agricultural teacher. Rank the one adding most to his success as 1, next 2, etc. ___ On-farm instruction and supervision ___ Community service ___ Classroom instruction

8. Please rank the following classes according to their value to your State (County, Community.) Rank the class most valuable as 1, next 2, etc.
___ Adult farmer ___ Young farmer ___ High school

9. Please rank the following 3 activities of the agricultural teacher according to their value to your State (County, Community.) Rank the activity most valuable as 1, next 2, etc. ___ Community service ___ On-farm instruction and supervision ___ Classroom instruction

Additional Questions Asked the Agricultural Teachers

1. General (as of June 1, 1952, or as of 1951-52 school year)
   a. Total years teaching experience ____, Years at present dept. ____,
   b. Class enrollment (1) All-day __ (2) Young farmer __ (3) Adult farmer __.

2. How did you spend your vacation time last year? ________________

3. How do you plan to spend your vacation time this year? __________

4. Ignoring vacations, conferences, summer school, etc., what is the length of your average work week? _____ hours.

5. Please list the number of hours spent on each of the following duties during an average 1951-52 school work week and rate each duty (according to whether it helped or hindered your overall vocational agriculture program) by checking column 1, 2, or 3.

	Hrs/wk 1952	Col. 1 Helped more than hindered	Col. 2 Hindered more than helped	Col. 3 Equally helped & hindered
a. Home room				
b. Teaching another subject. . .				
c. Coaching athletics.				
d. Taking ball game tickets. . .				
e. Study hall supervision. . . .				
f. School bus supervision. . . .				
g. School repair jobs*				
h. Community service*				
i. Coaching plays, class sponsor				
j. Civic meetings & duties . . .				
k. Other - explain				

6. What percentage of your school day (during school hours) are you allotted for community services? ________________________

7. What percentage of the school day (during school hours) do you need for community services?

8. What do you estimate is your least amount of time spent per week in all community service functions such as culling, pruning, de-horning, running a cannery, and similar activities? ___ hours per week. Of this total time, what percentage is spent in truly educational service? ___%. (Use your original intention as a guide in making this estimate.)

9. What is your estimate of the most amount of time spent per week in all community service functions such as culling, pruning, de-horning, running a cannery, etc.? ___ hours per week. Of this total time,

what percentage is spent in truly educational service? ___%. (Use your original intention as a guide in making this estimate.)

10. Is the coordination between classroom instruction and community service activities: (Circle answer) Excellent, Good, Fair, Poor?

11. How many hours per month do you spend in the following professional meetings: agricultural and agricultural education ___; general school ___; civic ___; other (list examples) ________________?

12. Beside each class below (considering the total time spent with the three classes as 100 per cent) please list the percentage of time deserved by each group, and the percentage of your time that each program actually received in 1951-52:

PROGRAM	% TIME DESERVED	% TIME RECEIVED '51-52
All-day		
Young farmer.		
Adult farmer.		

13. Beside each activity below (considering the total time spent with all three classes above) please list the percentage of your time that each activity deserves and the percentage of your time that each activity actually received in 1951-52.

ACTIVITY	% TIME DESERVED	% TIME RECEIVED '51-52
Classroom instruction . .		
On-farm instruction & supervision		
Community service		

14. Give below the estimated number of visits and total amount of time needed in on-farm visits with the "average" member of each class per year and the number of visits and total supervisory time spent with the "average" member of each class from Sept. 1, 1951 to Sept. 1, 1952.

	ANNUAL NUMBER OF VISITS		ANNUAL SUPERVISORY TIME (HRS)	
CLASS	NEEDED	MADE '51-52	NEEDED	SPENT '51-52
All-day				
Young farmer				
Adult farmer				

15. What percentage of your all-day supervisory visits are: (1) inspectional ___ (2) instructional ___ (3) functional ___ (4) social ___?

16. What percentage of your all-day supervisory visits are: (1) excellent ___ (2) good ___ (3) fair ___ (4) poor ___?

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BIOGRAPHICAL ITEMS

The author, Franklin Holloway Spain, Jr., was born in Vance County, North Carolina, August 22, 1924. He was graduated from Middleburg High School, Middleburg, North Carolina in 1941. In September of that year he enrolled at North Carolina State College of Agriculture and Engineering of the University of North Carolina, Raleigh.

At the end of his sophomore year he entered the United States Air Force, where he attained the rank of second lieutenant and the rating of a B-29 bombardier.

Returning to college in 1946, the writer earned his B.S. degree in Agricultural Education in 1947 and his M.S. degree in that field in 1948. While an undergraduate he taught farmer veterans for a period of one and one-half years. While a graduate student he served as research assistant for the Department of Agricultural Education.

The author taught vocational agriculture in the public school system of North Carolina from January 1, 1949 through May, 1950, at which time he became Assistant Director of Admissions at North Carolina State College, the position he now holds. In this capacity he did graduate work at that institution during 1951-52.

In September, 1952 the author started his doctoral program at the University of Florida, Gainesville, Florida.

The author holds the American Farmer Degree in the Future Farmers of America organization and has membership in Alpha Tau Alpha, Alpha Zeta, Blue Key, Kappa Phi Kappa, Phi Delta Kappa, and Phi Kappa Phi.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of the committee. It was submitted to the Dean of the College of Education and to the Graduate Council and was approved as partial fulfilment of the requirements for the degree of Doctor of Education.

January 30, 1954

Charles R. Foster
Dean, College of Education

Dean, Graduate School

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